

حمل الآن

مجاناً وحصرياً

المراجعة رقم (1)

اختبار شهر نوفمبر



1 A) Complete the following sentence:

- The eye sends messages to the through the sensory nerves.

B) Answer the following questions:

- Classify** the following materials into "Transparent" and "Opaque".
(Skin- Milk-Water-Window-Glass-Rock)

Transparent material	Opaque material

- What happens when** engineers placed jet engines inside a normal truck instead of its normal engine?

- Look at the opposite figures, then answer:**

If we push them with the same force, what do you think which one of them will cover a longer distance?



2 A) Put (✓) or (X) in front of the following sentence:

- The moon is a source of light. ()

B) Mention the importance or function of each of the following:

- Friction

- Night vision goggles

3 A) Choose the correct answer:

- Parachutes are used in the shockwave truck to
 - increase its speed
 - decrease its speed
 - keep its speed as it is
 - change its direction

B) Give a reason for each of the following:

- The shockwave truck is faster than the normal truck.

- The fishing cat's eyes seem to glow in the dark.

1 A) Cross out the odd word:

- Paper – Wood – Metal – Cloth

B) What is meant by ...?

- 1 Motion

.....

- 2 Shadow

.....

- 3 Gravity

.....

2 A) Correct the underlined word in the following sentence:

- Moving an object away from you represents a pulling force. (.....)

B) Answer the following questions:

- Imagine that a mobile phone fell from your hand to the ground and the screen broke.



- 1 What would happen to the light rays reflected from it?

.....

- 2 Draw the path of the incident and reflected light rays from the screen both before and after it breaks.

.....

3 A) Choose the correct answer:

- For a static ball, all of the following equal zero, except the

a) Force b) speed c) mass d) friction

B) Give a reason for:

- 1 When the number of fire extinguishers is increased, the cart covers a longer distance.

.....

- 2 The pupils of the nocturnal animals' eyes open wider than humans in dim light.

.....

1 A) Write the scientific term:

- A pattern that has a meaning. (.....)

B) Answer the following questions:

1 Compare between

smooth (shiny) and rough objects in terms of the ability to reflect light.

P.O.C	Smooth (shiny) Objects	Rough Objects
Ability to reflect light		
Example		

2 Which wagon moves faster?

.....



(2)



(1)

- 3 Your friend wanted to prevent the light from entering his room. Suggest him some materials that he can use on the window to prevent the light from entering the room.

.....

2 A) Put (✓) or (X) in front of the following sentence:

- Unbalanced forces cause a change in the object's motion. ()

B) What happens if ...?

- 1 Light falls on an opaque object.

.....

- 2 You push two similar toy cars with different forces on the ground.

.....

3 A) Complete the following sentence:

- When playing pulling a rope game, if each team pulls the rope with equal force, the forces are

B) Give a reason for each of the following:

- 1 When you throw an apple up, it returns back to the ground.

.....

- 2 Fireflies produce a chemical reaction inside their bodies.

.....

1 A) Choose the correct answer:

- All of the following examples represent the pushing force, except
 - a) kicking a ball
 - b) pressing on an electrical switch
 - c) closing the disk's drawer
 - d) dragging the hook after catching a fish

B) Give a reason for each of the following:

- 1 When two pulling forces act on an object in opposite directions, the object does not move.
.....
- 2 You can see an object placed behind a glass window.
.....
- 3 When you stop pedaling during the movement of your bicycle, it slows down until it stops.
.....

2 A) Complete the following sentence:

- The different languages are considered as

B) What happens if ... ?

- 1 Light falls on a smooth shiny surface.
.....
- 2 The pulling forces of the two teams are unbalanced in a tug-of-war game.
.....

3 A) Put (✓) or (X) in front of the following sentence:

- We see the objects as a result of the absorption of the light rays on our eyes. ()

B) What is meant by ... ?

- 1 A source of light.
.....
- 2 Work.
.....

1 A) Complete the following sentence:

- The eye sends messages to the **brain** through the sensory nerves.

B) Answer the following questions:

- 1 **Classify** the following materials into "Transparent" and "Opaque".
(Skin- Milk-Water-Window-Glass-Rock)

Transparent material	Opaque material
Water – Window – Glass	Skin – Milk – Rock

- 2 **What happens when** engineers placed jet engines inside a normal truck instead of its normal engine?

- It will move faster.

- 3 **Look at the opposite figures, then answer:**

If we push them with the same force, what do you think which one of them will cover a longer distance?



- The bicycle will cover a longer distance than the truck.

2 A) Put (✓) or (X) in front of the following sentence:

- The moon is a source of light.

(X)

B) Mention the importance or function of each of the following:

- 1 Friction
- It always slows down or stops motion of moving objects.
- 2 Night vision goggles
- They are used by humans to see in the dark.

3 A) Choose the correct answer:

- Parachutes are used in the shockwave truck to
 - a) increase its speed
 - b) decrease its speed
 - c) keep its speed as it is
 - d) change its direction

B) Give a reason for each of the following:

- 1 The shockwave truck is faster than the normal truck.
- Because it has three jet engines.
- 2 The fishing cat's eyes seem to glow in the dark.
- Because it has a mirror-like membrane at the back of its eyes that reflects the light rays that fall on it.

1

- d) glass

1

- 2

- 3

- 2

- (Light reflection)

1

- 2

- 3

- 1

- 2

- 3

1 A) Cross out the odd word:

- Paper – Wood – **Metal** – Cloth

B) What is meant by ...?

1 Motion

- It is the change of the position of an object relative to a fixed point.

2 Shadow

- It is a dark area that is formed when light falls on an opaque object.

3 Gravity

- It is the force that pulls objects towards the Earth's center.

2 A) Correct the underlined word in the following sentence:

- Moving an object away from you represents a pulling force.

(pushing)

B) Answer the following questions:

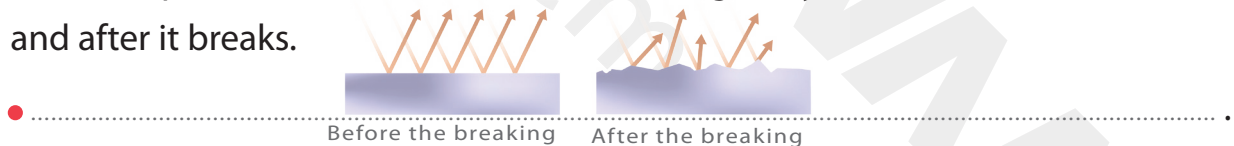
- Imagine that a mobile phone fell from your hand to the ground and the screen broke.



1 What would happen to the light rays reflected from it?

- Light rays are diffused in different directions.

2 Draw the path of the incident and reflected light rays from the screen both before and after it breaks.



3 A) Choose the correct answer:

- For a static ball, all of the following equal zero, except the

- a) Force b) speed **c) mass** d) friction

B) Give a reason for:

1 When the number of fire extinguishers is increased, the cart covers a longer distance.

- Because by increasing the number of fire extinguishers, the speed of the cart increases.

2 The pupils of the nocturnal animals' eyes open wider than humans in dim light.

- To allow more lights to enter their eyes, so they can see well in dim light.

1 A) Write the scientific term:

- A pattern that has a meaning.

(Code)

B) Answer the following questions:

1 Compare between

smooth (shiny) and rough objects in terms of the ability to reflect light.

P.O.C	Smooth (shiny) Objects	Rough Objects
Ability to reflect light	They reflect most of light rays.	They reflect less amount of light rays.
Example	Mirrors and metals	Wood

2 Which wagon moves faster?

- (1)



(2)



(1)

- 3 Your friend wanted to prevent the light from entering his room. Suggest him some materials that he can use on the window to prevent the light from entering the room.

- Carton or aluminum foil.

2 A) Put (✓) or (X) in front of the following sentence:

- Unbalanced forces cause a change in the object's motion.

(✓)

B) What happens if ...?

- 1 Light falls on an opaque object.

- Light will not pass through it and a shadow will be formed.

- 2 You push two similar toy cars with different forces on the ground.

- The car that is affected with the greater force will move for a longer distance.

3 A) Complete the following sentence:

- When playing pulling a rope game, if each team pulls the rope with equal force, the forces are **balanced**.

B) Give a reason for each of the following:

- 1 When you throw an apple up, it returns back to the ground.

- Due to the gravity of the Earth that pulls the apple down towards the Earth's center.

- 2 Fireflies produce a chemical reaction inside their bodies.

- To light up their bodies and communicate with each other.

1 A) Choose the correct answer:

- All of the following examples represent the pushing force, except
 - a) kicking a ball
 - b) pressing on an electrical switch
 - c) closing the disk's drawer
 - d) dragging the hook after catching a fish

B) Give a reason for each of the following:

- 1 When two pulling forces act on an object in opposite directions, the object does not move.
 - Because the two forces are balanced.
- 2 You can see an object placed behind a glass window.
 - Because glass is a transparent material that allows light to pass through.
- 3 When you stop pedaling during the movement of your bicycle, it slows down until it stops.
 - Due to the friction force between the tires of the bicycle and the road.

2 A) Complete the following sentence:

- The different languages are considered as codes.

B) What happens if ... ?

- 1 Light falls on a smooth shiny surface.
 - Light rays are reflected in one direction with the same angle.
- 2 The pulling forces of the two teams are unbalanced in a tug-of-war game.
 - The rope will move towards the greater force.

3 A) Put (✓) or (X) in front of the following sentence:

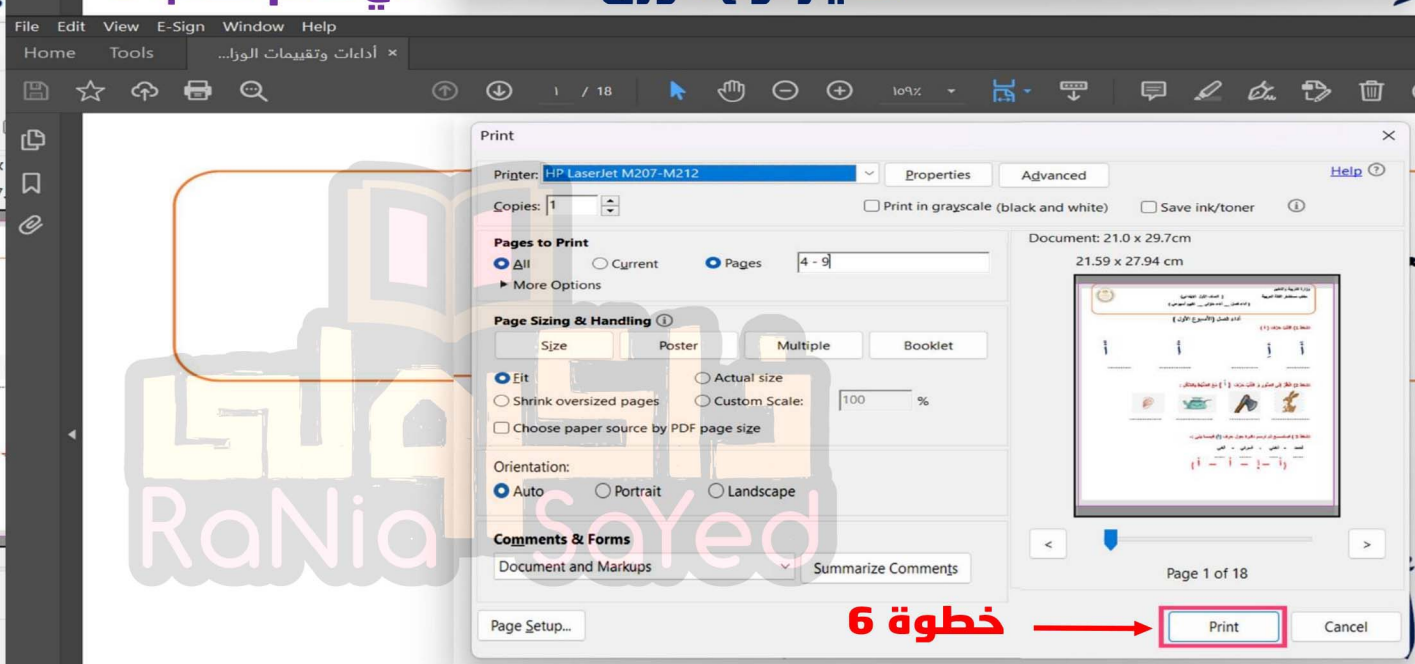
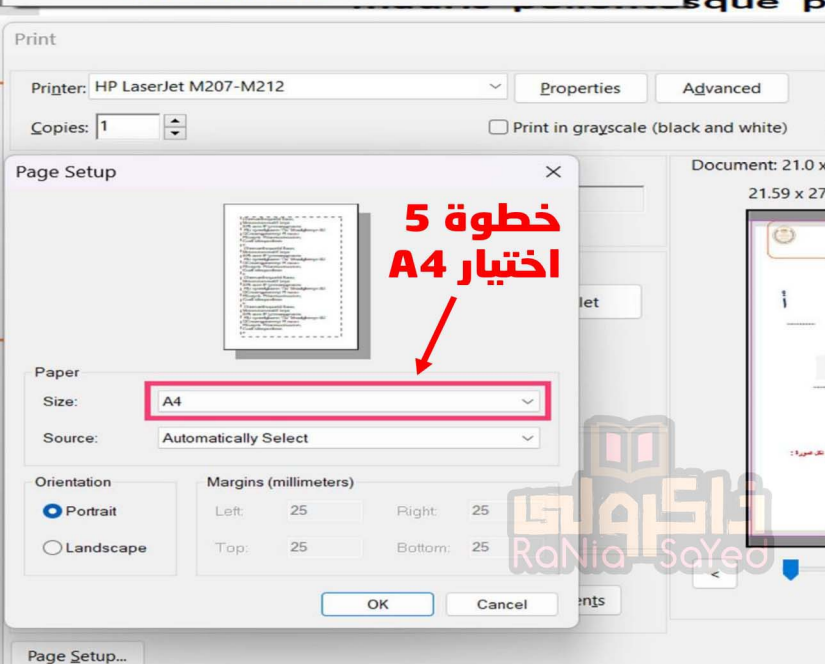
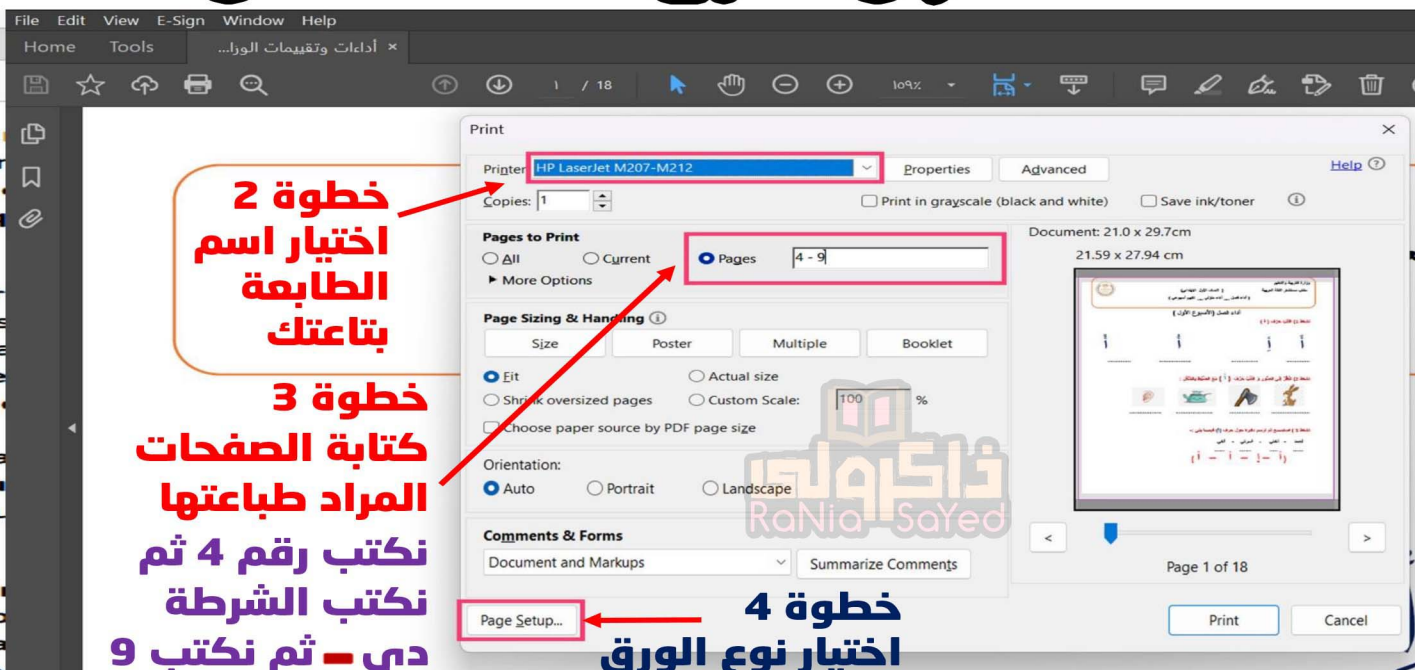
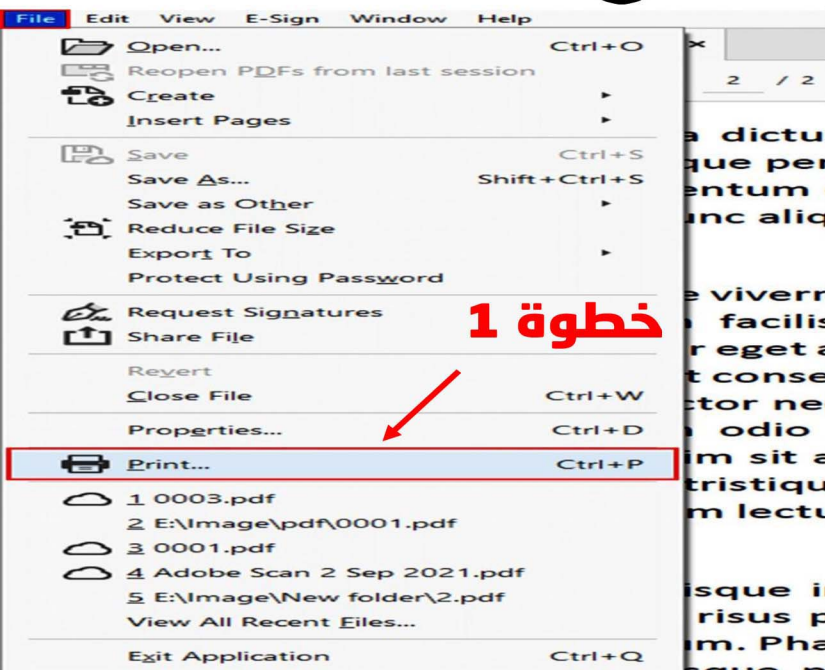
- We see the objects as a result of the absorption of the light rays on our eyes. (X)

B) What is meant by ... ?

- 1 A source of light.
 - It is an object that gives off its own light.
- 2 Work.
 - It is the energy needed to move an object by applying a force on it.

كيفية طباعة صفحات معينة من ملف معين

مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9



حمل الآن

مجاناً وحصرياً

المراجعة رقم (2)

اختبار شهر نوفمبر



Concept

1.3

Q1

Choose the correct answer:

- 1 energy affects the sensory receptors in the eyes, causing vision. (Dakahlia 2023)
a. Sound b. Kinetic c. Light d. Magnetic
- 2 The pupils of nocturnal animal open those of humans. (Giza 2023)
a. narrower than b. similar to c. typical to d. wider than
- 3 Each of the following is considered a source of light, except the (Cairo 2024)
a. fire b. Sun c. lamp d. eye
- 4 The is a natural source of light. (Week 6 H.W)
a. fire b. moon c. Sun d. candle
- 5 Which of the following organs are working together for seeing different objects? (Kafr El-Sheikh 2022)
a. Nose and brain b. Eyes and brain
c. Ears and brain d. Tongue and brain
- 6 Light travels in lines in the air. (Giza 2023 - Week 6 C.W)
a. curved b. straight c. circular d. zigzag
- 7 Light is a form of (Week 6 H.W)
a. energy b. work c. matter d. force
- 8 Hossam wants to make a box to see its contents from the outside; which of the following materials will he use? (Week 6 C.W)
a. Cardboard b. Transparent glass
c. Opaque plastic d. Smooth mirror
- 9 When light falls on a mirror, it is (Week 6 H.W)
a. reflected b. refracted c. scattered d. absorbed
- 10 In order to see things clearly, we must have a source of energy. (Week 8 C.W)
a. chemical b. light c. sound d. heat
- 11 Which of the following is an opaque object? (Week 6 H.W)
a. Lenses b. Wood c. Water d. Air

- 12 All the following are opaque objects, except (Giza 2023)
 a. wood b. water c. carton d. human body
- 13 Which of the following materials reflect light best? (Week 6 C.W)
 a. Wood b. Cloth c. Mirrors d. Paper
- 14 The process of vision occurs as a result of of light. (Week 6 C.W)
 a. scattering b. reflection c. absorption d. destroying
- 15 produce a chemical reaction inside their bodies to light up.
 a. Owls b. Fireflies c. Frogs d. Bats (Azhar 2023)
- 16 The firefly produces patterns of light to other fireflies. (Giza 2022)
 a. hear b. warn c. mate with d. b and c
- 17 A firefly is not a bird, but it is a type of (Sharkia 2024)
 a. flies b. lizards c. beetles d. reptiles
- 18 Fireflies use their to release flashes. (Week 7 H.W)
 a. eyes b. wings c. tails d. gills
- 19 All the following are forms of codes, except
 a. traffic lights b. facial expressions
 c. swimming d. drums (Ismailia 2022 - Week 7 C.W)
- 20 Raising your thumb up or down is a type of
 a. sound b. light c. language d. code
 (Week 7 H.W - Ismailia 2023)
- 21 Writing and reading are ways to communication for
 a. humans b. animals c. birds d. plants
 (Giza 2022 - Week 7 C.W)
- 22 Animals communicate together through
 a. writing b. reading
 c. talking d. sound and light (Giza 2022)
- 23 Travelers use to attract the attention of helicopter pilots to rescue them. (Week 7 C.W)
 a. traffic lights b. mirrors c. drums d. lighthouses

- 24 Sense organs collect information and send signals to the for processing and understanding. (Port Said 2022)
- a. hands b. legs c. brain d. stomach

Q2

Put (✓) or (X):

- 1 Nocturnal animals have larger eyes than humans. (Damietta 2024 - Week 6 H.W) ()
- 2 The Sun and the moon are sources of light. (Week 6 C.W) ()
- 3 Both humans and animals need a light source to see. (Giza - Dakhlia 2023) ()
- 4 Eyes are considered sensory organs of light, not as a source of light. (Beni Suef 2023) ()
- 5 All animals have the ability to see at night. (Assiut 2023) ()
- 6 Fishing cats can't hunt in low-light places. (Dakahlia 2023) ()
- 7 Humans have excellent night vision, better than fishing cats. (Suez 2024) ()
- 8 Light travels in straight lines. (Alex. 2023) ()
- 9 Rough objects reflect light better than smooth ones. (Week 6 H.W) ()
- 10 Objects can be seen due to the absorption of light. (Week 6 C.W) ()
- 11 Smooth surfaces reflect light better than rough surfaces. (Week 6 C.W) ()
- 12 We can see the moon bright although it doesn't emit any light. (Giza 2024) ()
- 13 Transparent objects include mirrors and lenses. (Cairo 2024) ()
- 14 Transparent objects don't allow light to pass through it. (Alex. 2024) ()
- 15 If I can see my face clearly on a surface, this means that it is a smooth, shiny surface. (Qalyubia 2023) ()
- 16 Wood is a transparent object that allows light to pass through it. (Assiut 2023) ()
- 17 Writing is a way of communication between animals. (Beni Suef 2023) ()
- 18 Sound and light are common methods of communication between humans and animals. (Menoufia 2024) ()
- 19 Speaking is the only way to communicate with people. (Giza 2023) ()
- 20 In order for the code to be translated, the brain must identify it. (Assiut 2023) ()

Q3**Write the scientific term:**

- 1 It is the organ that is affected by light and responsible for sight.
(Giza 2024 - Week 6 H.W) (.....)
- 2 They are animals that communicate with each other by flashing (lighting).
(Week 7 Test 2) (.....)
- 3 They are objects that emit their own light. (Cairo 2023) (.....)
- 4 It is a body that appears lighted in the sky, but it is not considered a source of light.
(Giza 2023) (.....)
- 5 It is a device that humans can depend on to see in the dark.
(Cairo 2023) (.....)
- 6 It is a visible form of energy that enables us to see.
(Cairo 2023) (.....)
- 7 It is a structural adaptation in the eyes that helps animals in hunting at night and to avoid being hunted by other animals.
(Azhar - Giza 2023) (.....)
- 8 They are materials that allow light to pass through.
(Cairo 2023) (.....)
- 9 It is a type of surface that reflects light in different directions.
(Cairo 2023) (.....)
- 10 They are materials through which objects cannot be seen.
(Week 6 H.W) (.....)
- 11 It is a pattern that has meaning. (Week 7 Test 1) (.....)
- 12 Raising your thumb up or down (Week 7 Test 3) (.....)

Q4.**Complete the following sentences:**

- 1 To communicate by sight, we need (Week 7 H.W)
- 2 The form of energy that can be seen is energy. (Alex. 2024)
- 3 The is the sensory organ that is affected by light. (Kafr El-Sheikh 2023)
- 4 All cats have a at the back of their eyes.
(Qalyubia 2024)

- 5 Humans use to see in low-light places. (Dakahlia 2023)
- 6 Fishing cats can hunt at night due to the bouncing off of energy. (Beni Suef 2024)
- 7 The pupils of eyes of nocturnal animals usually open than the pupils of humans eyes. (Dakahlia 2023)
- 8 The eyes of fishing cats have a mirror-like membrane that bounces off the light, and this is considered a adaptation. (Beni Suef 2022)
- 9 Fireflies are found on trees in Thailand. (Week 7 Test 3)
- 10 Fireflies use their to release flashes of light. (Week 7 Test 1)
- 11 Fireflies communicate with each other through (Mansoura 2023 - Week 7 C.W)
- 12 Fireflies use the sense of to communicate with each other. (Cairo 2023 - Week 7 H.W)
- 13 Light is produced as a result of a that occurs inside the bodies of the fireflies. (Dakahlia 2023 - Week 7 C.W)
- 14 In order to translate the code, the must identify it. (Week 7 H.W)
- 15 Man uses codes to transfer (Week 7 H.W)
- 16 Raising your thumb up or down is a type of (Week 7 C.W)
- 17 One of the ways of communication for humans is (Week 7 H.W)
- 18 One example of codes is (Week 7 Test 2)
- 19 Hand signals are a type of (Week 8 C.W)
- 20 Light travels in lines. (Week 8 C.W - Alex. 2024)
- 21 When light falls on an object, it , so we can see this object. (Dakahlia 2023)
- 22 When light falls on an opaque object, is formed. (Dakahlia 2023)
- 23 Cloth and paper are considered surfaces that scatter or diffuse light energy. (Giza 2024)
- 24 Smooth surfaces reflect light in direction. (Cairo 2023)
- 25 Your eyes use to collect information. (Week 7 C.W)
- 26 Man uses his senses of and to communicate. (Week 7 C.W)
- 27 A is considered a pattern that has a meaning. (Week 7 H.W)

Q5 Cross out the odd word:

- 1 Fishing cat – Owl – Dolphin – Bat (Azhar - Giza 2023) (.....)
- 2 Flashlight – The moon – Fire – Candle (Dakahlia 2024) (.....)
- 3 Wood – Glass cup – Book – Wax (Cairo 2023) (.....)
- 4 Air – Water – Wood – Glass (Dakahlia 2023) (.....)

Q6 Give reasons for:

- 1 The moon appears bright although it is not a source of light.
(Cairo 2024 - Week 6 C.W)
.....
.....
- 2 Fireflies emit a luminous flash. (Week 7 Test 1)
.....
.....
- 3 Some animals have the ability to see in the dark. (Red Sea 2023)
.....
.....
- 4 The eyes of humans do not glow in the dark like cats. (Cairo 2023)
.....
.....
- 5 Glass is a transparent material. (Week 8 Test 2 - Alex. 2024)
.....
.....
- 6 Humans sometimes use codes. (Week 7 Test 2)
.....
.....
- 7 A mirror can reflect light better than a painted surface. (Giza 2023)
.....
.....
- 8 Wood is considered an opaque material. (Alex. 2024)
.....
.....
- 9 A shadow is formed when light falls on an opaque object. (Dakahlia 2024)
.....
.....
- 10 You can see an object placed behind a glass cup or a lens. (Qalyubia 2023)
.....
.....
- 11 None of the light energy passes through opaque objects. (Alex. 2023)
.....
.....

Q7

What happens if:

- 1 Fireflies do not emit flashes?

(Week 7 Test 3)

.....

.....

.....

- 2 A firefly wants to attract a mate to reproduce?

(Cairo 2023)

.....

- 3 Light falls on a rough surface, such as wood or paper?

(Week 6 H.W)

.....

- 4 The backcountry hikers do not have mirrors?

(Week 7 Test 1)

.....

- 5 The codes have no meaning?

(Week 7 Test 2)

.....

- 6 Light falls on a shiny, smooth surface, such as a mirror?

(Red Sea 2023 - Week 6 H.W)

.....

- 7 The mirror-like membrane in a fishing cat's eyes is not present?

.....

(Dakahlia 2024)

- 8 You place an opaque object between a light source and a wall?

.....

(Ismailia 2023)

Q8

What is meant by each of the following:

- 1 Transparent objects

(Week 8 C.W)

.....

.....

- 2 Code

(Week 7 C.W)

.....

Q9

Answer the following questions:

- 1 Mention an example of behavioral adaptation in fireflies. (Week 7 Test 2)

.....

.....

- 2 Mention one benefit of flashes emitted by fireflies. (Week 7 Test 3)

.....

.....

- 3 Mention two examples of codes used by humans in their daily lives.

(Week 7 H.W)

.....

Concept 2.1 Lessons 1 & 2

Q1 Choose the correct answer:

- 1 All the following are examples of pulling force, except.....
 - a. opening the desk drawer
 - b. kicking a ball
 - c. tug-of-war game
 - d. lifting up a bag (Qalyubia 2024)
- 2 When you move something toward you, this represents
 - a. pushing force
 - b. light energy
 - c. pulling force
 - d. sound energy (Cairo 2023)
- 3 When you move something away from you, this represents
 - a. pushing force
 - b. light energy
 - c. pulling force
 - d. sound energy (Alex. 2024)
- 4 Push or pull actions are considered types of
 - a. energy
 - b. device
 - c. force
 - d. adaptation (Giza 2023)
- 5 The force that is used to kick a ball with your legs is a
 - a. pull
 - b. push
 - c. sound
 - d. light (Port Said - Menoufia 2023)
- 6 Objects fall down to the center of the Earth by the force of
 - a. friction
 - b. gravity
 - c. wind
 - d. pushing (Cairo - Giza - Alex. 2023)
- 7 You can see the movement of the following objects, except the movement of
 - a. a flying airplane
 - b. a running horse
 - c. sea waves
 - d. the planet Earth (Giza 2023)
- 8 When an object is in motion, this means that its changes.
 - a. color
 - b. shape
 - c. size
 - d. position (Cairo 2023)
- 9 Which of the following will cause an object to move?
 - a. Balanced forces
 - b. Unbalanced forces
 - c. Sound energy
 - d. Light energy (Luxor 2022)

- 10** All the following are examples of motion, except
a. a running person **b.** a ball traveling through the air
c. a flying bird **d.** a sleeping dog (Cairo 2024)
- 11** When you sit on a chair, the force of gravity is and holding you in the chair. (Cairo 2022)
a. pulling you upward **b.** pulling you downward
c. pushing you upward **d.** pushing you downward

Q2 Put (✓) or (x):

- 1 The engine of a jet plane is weaker than the engine of a car. (Week 9 H.W) ()
- 2 Objects do not move if no force affects them. (Week 9 H.W) ()
- 3 The body is static when it moves from one place to another. (Week 9 H.W) ()
- 4 The movement of the planets can be seen in the sky. (Week 9 H.W) ()
- 5 A normal truck can move faster than a jet airplane. (Suez 2024) ()
- 6 When the position of an object changes in relation to a fixed point, it moves. (Assiut 2023) ()
- 7 Unbalanced forces cause a change in the object's position. (Minia 2024) ()
- 8 Gravity pulls objects upward. (Port Said 2023) ()
- 9 Unbalanced forces cause the motion of objects. (Mansoura 2023) ()
- 10 Moving an object away from you represents a pulling force. (Cairo 2024) ()

Q3 Write the scientific term:

- 1 It is a push or pull that is applied to an object, causing it to change its position. (Cairo 2022) (.....)
- 2 It is a force that makes objects move away from you. (Menoufia 2024 - Week 9 H.W) (.....)
- 3 It is a force that causes objects to move toward you. (Week 9 H.W) (.....)

- 4 It is a change in an object's position relative to a fixed point.
(Giza 2024) (.....)
- 5 It is a force that pulls objects down toward the Earth.
(Behira 2024 - Week 9 Test 1) (.....)

04 Complete the following sentences:

- 1 cause the movement of static bodies. (Week 9 C.W)
- 2 The body whose position does not change is in a state.
(Week 9 C.W)
- 3 There are two types of forces, which are and forces. (Week 9 Test 2)
- 4 Kicking the ball is considered a force. (Week 9 C.W)
- 5 Opening the door handle is a force. (Week 9 H.W)
- 6 The leaves blow due to the force of the air. (Week 9 C.W)
- 7 Tightening the hook is a force. (Week 9 Test 3)
- 8 is the force that pulls things downwards. (Cairo 2024)
- 9 The fastest truck in the world is the truck. (Week 9 C.W)
- 10 The speed of trucks differ according to the and of engines. (Week 9 H.W)
- 11 The parachutes supplied to the Shockwave truck help drivers to reduce its (Week 9 C.W)
- 12 When increasing the engine power of a truck, the speed will (Week 9 C.W)
- 13 To move a car more quickly, you must the engine pushing power. (Week 9 C.W)
- 14 The Shockwave truck is stopped by
(Alex. 2023 - Week 9 H.W)
- 15 A moving object is acted on by forces, while the body at rest is acted on by balanced forces. (Week 9 Test 1)

Q5 Give reasons for:

- 1 The Shockwave truck is faster than the normal truck.

(Giza 2024 - Week 9 Test 1)

.....

- 2 The cart starts moving when the gases come out of the fire extinguishers.

(Week 9 Test 2)

.....

.....

- 3 The body does not move when it is exerted on by balanced forces.

(Week 9 Test 3)

.....

Q6 What happens if:

- 1 You hit a ball strongly with your foot?

(Alex. (East) 2024)

.....

- 2 We increase the number of fire extinguishers on the cart?

(Week 9 Test 2)

.....

- 3 Balanced forces act on a static object?

(Beni Suef 2023)

.....

Q7 What is meant by each of the following:

- 1 Pushing force

(Week 9 C.W)

.....

- 2 Pulling force

(Week 9 C.W)

.....

- 3 Movement (Motion)

(Week 9 H.W)

.....

.....

- 4 Gravity

(Week 9 H.W)

.....

Q8 Answer the following questions:

- 1 Give an example of pushing and pulling forces. (Week 9 Test 1)

.....

.....

- 2 Mention the state of the body when balanced and other unbalanced forces affect it. (Week 9 Test 2)

.....

.....

- 3 Give an example of an easily seen movement and another that cannot be seen. (Week 9 Test 3)

.....

.....

Concept

1.3

Q1

Choose the correct answer:

- 1 energy affects the sensory receptors in the eyes, causing vision. (Dakahlia 2023)
a. Sound b. Kinetic c. Light d. Magnetic
- 2 The pupils of nocturnal animal open those of humans. (Giza 2023)
a. narrower than b. similar to c. typical to d. wider than
- 3 Each of the following is considered a source of light, except the (Cairo 2024)
a. fire b. Sun c. lamp d. eye
- 4 The is a natural source of light. (Week 6 H.W)
a. fire b. moon c. Sun d. candle
- 5 Which of the following organs are working together for seeing different objects? (Kafr El-Sheikh 2022)
a. Nose and brain b. Eyes and brain
c. Ears and brain d. Tongue and brain
- 6 Light travels in lines in the air. (Giza 2023 - Week 6 C.W)
a. curved b. straight c. circular d. zigzag
- 7 Light is a form of (Week 6 H.W)
a. energy b. work c. matter d. force
- 8 Hossam wants to make a box to see its contents from the outside; which of the following materials will he use? (Week 6 C.W)
a. Cardboard b. Transparent glass
c. Opaque plastic d. Smooth mirror
- 9 When light falls on a mirror, it is (Week 6 H.W)
a. reflected b. refracted c. scattered d. absorbed
- 10 In order to see things clearly, we must have a source of energy. (Week 8 C.W)
a. chemical b. light c. sound d. heat
- 11 Which of the following is an opaque object? (Week 6 H.W)
a. Lenses b. Wood c. Water d. Air

- 12 All the following are opaque objects, except (Giza 2023)
 a. wood b. water c. carton d. human body
- 13 Which of the following materials reflect light best? (Week 6 C.W)
 a. Wood b. Cloth c. Mirrors d. Paper
- 14 The process of vision occurs as a result of of light. (Week 6 C.W)
 a. scattering b. reflection c. absorption d. destroying
- 15 produce a chemical reaction inside their bodies to light up.
 a. Owls b. Fireflies c. Frogs d. Bats (Azhar 2023)
- 16 The firefly produces patterns of light to other fireflies. (Giza 2022)
 a. hear b. warn c. mate with d. b and c
- 17 A firefly is not a bird, but it is a type of (Sharkia 2024)
 a. flies b. lizards c. beetles d. reptiles
- 18 Fireflies use their to release flashes. (Week 7 H.W)
 a. eyes b. wings c. tails d. gills
- 19 All the following are forms of codes, except
 a. traffic lights b. facial expressions
 c. swimming d. drums (Ismailia 2022 - Week 7 C.W)
- 20 Raising your thumb up or down is a type of
 a. sound b. light c. language d. code
 (Week 7 H.W - Ismailia 2023)
- 21 Writing and reading are ways to communication for
 a. humans b. animals c. birds d. plants
 (Giza 2022 - Week 7 C.W)
- 22 Animals communicate together through
 a. writing b. reading
 c. talking d. sound and light (Giza 2022)
- 23 Travelers use to attract the attention of helicopter pilots to rescue them. (Week 7 C.W)
 a. traffic lights b. mirrors c. drums d. lighthouses

- 24 Sense organs collect information and send signals to the for processing and understanding. (Port Said 2022)
- a. hands b. legs c. brain d. stomach

Q2 Put (✓) or (X):

- 1 Nocturnal animals have larger eyes than humans. (Damietta 2024 - Week 6 H.W) (✓)
- 2 The Sun and the moon are sources of light. (Week 6 C.W) (X)
- 3 Both humans and animals need a light source to see. (Giza - Dakhlia 2023) (✓)
- 4 Eyes are considered sensory organs of light, not as a source of light. (Beni Suef 2023) (✓)
- 5 All animals have the ability to see at night. (Assiut 2023) (X)
- 6 Fishing cats can't hunt in low-light places. (Dakahlia 2023) (X)
- 7 Humans have excellent night vision, better than fishing cats. (Suez 2024) (X)
- 8 Light travels in straight lines. (Alex. 2023) (✓)
- 9 Rough objects reflect light better than smooth ones. (Week 6 H.W) (X)
- 10 Objects can be seen due to the absorption of light. (Week 6 C.W) (X)
- 11 Smooth surfaces reflect light better than rough surfaces. (Week 6 C.W) (✓)
- 12 We can see the moon bright although it doesn't emit any light. (Giza 2024) (✓)
- 13 Transparent objects include mirrors and lenses. (Cairo 2024) (X)
- 14 Transparent objects don't allow light to pass through it. (Alex. 2024) (X)
- 15 If I can see my face clearly on a surface, this means that it is a smooth, shiny surface. (Qalyubia 2023) (✓)
- 16 Wood is a transparent object that allows light to pass through it. (Assiut 2023) (X)
- 17 Writing is a way of communication between animals. (Beni Suef 2023) (X)
- 18 Sound and light are common methods of communication between humans and animals. (Menoufia 2024) (✓)
- 19 Speaking is the only way to communicate with people. (Giza 2023) (X)
- 20 In order for the code to be translated, the brain must identify it. (Assiut 2023) (✓)

Q3 Write the scientific term:

- 1 It is the organ that is affected by light and responsible for sight.
(Giza 2024 - Week 6 H.W) (**Eye**)
- 2 They are animals that communicate with each other by flashing (lighting).
(Week 7 Test 2) (**Fireflies**)
- 3 They are objects that emit their own light. (Cairo 2023) (**Sources of light**)
- 4 It is a body that appears lighted in the sky, but it is not considered a source of light.
(Giza 2023) (**The moon**)
- 5 It is a device that humans can depend on to see in the dark.
(Cairo 2023) (**Night vision goggles**)
- 6 It is a visible form of energy that enables us to see.
(Cairo 2023) (**Light energy**)
- 7 It is a structural adaptation in the eyes that helps animals in hunting at night and to avoid being hunted by other animals.
(Azhar - Giza 2023) (**Mirror-like membrane**)
- 8 They are materials that allow light to pass through.
(Cairo 2023) (**Transparent materials**)
- 9 It is a type of surface that reflects light in different directions.
(Cairo 2023) (**Rough surface**)
- 10 They are materials through which objects cannot be seen.
(Week 6 H.W) (**Opaque objects**)
- 11 It is a pattern that has meaning. (Week 7 Test 1) (**Code**)
- 12 Raising your thumb up or down (Week 7 Test 3) (**Code**)

Q4. Complete the following sentences:

- 1 To communicate by sight, we need **light**. (Week 7 H.W)
- 2 The form of energy that can be seen is **light** energy. (Alex. 2024)
- 3 The **eye** is the sensory organ that is affected by light. (Kafr El-Sheikh 2023)
- 4 All cats have a **mirror-like membrane** at the back of their eyes.
(Qalyubia 2024)

- 5 Humans use night vision goggles to see in low-light places. (Dakahlia 2023)
- 6 Fishing cats can hunt at night due to the bouncing off of light energy. (Beni Suef 2024)
- 7 The pupils of eyes of nocturnal animals usually open wider than the pupils of humans eyes. (Dakahlia 2023)
- 8 The eyes of fishing cats have a mirror-like membrane that bounces off the light, and this is considered a structural adaptation. (Beni Suef 2022)
- 9 Fireflies are found on mangrove trees in Thailand. (Week 7 Test 3)
- 10 Fireflies use their wings to release flashes of light. (Week 7 Test 1)
- 11 Fireflies communicate with each other through light. (Mansoura 2023 - Week 7 C.W)
- 12 Fireflies use the sense of sight to communicate with each other. (Cairo 2023 - Week 7 H.W)
- 13 Light is produced as a result of a chemical reaction that occurs inside the bodies of the fireflies. (Dakahlia 2023 - Week 7 C.W)
- 14 In order to translate the code, the brain must identify it. (Week 7 H.W)
- 15 Man uses codes to transfer information. (Week 7 H.W)
- 16 Raising your thumb up or down is a type of code. (Week 7 C.W)
- 17 One of the ways of communication for humans is writing. (Week 7 H.W)
- 18 One example of codes is raising the thumb up or down. (Week 7 Test 2)
- 19 Hand signals are a type of codes. (Week 8 C.W)
- 20 Light travels in straight lines. (Week 8 C.W - Alex. 2024)
- 21 When light falls on an object, it reflects, so we can see this object. (Dakahlia 2023)
- 22 When light falls on an opaque object, shadow is formed. (Dakahlia 2023)
- 23 Cloth and paper are considered rough surfaces that scatter or diffuse light energy. (Giza 2024)
- 24 Smooth surfaces reflect light in one direction. (Cairo 2023)
- 25 Your eyes use light to collect information. (Week 7 C.W)
- 26 Man uses his senses of sight and hearing to communicate. (Week 7 C.W)
- 27 A code is considered a pattern that has a meaning. (Week 7 H.W)

Q5 Cross out the odd word:

- 1 Fishing cat – Owl – Dolphin – Bat (Azhar - Giza 2023) (**Dolphin**)
- 2 Flashlight – The moon – Fire – Candle (Dakahlia 2024) (**The moon**)
- 3 Wood – Glass cup – Book – Wax (Cairo 2023) (**Glass cup**)
- 4 Air – Water – Wood – Glass (Dakahlia 2023) (**Wood**)

Q6 Give reasons for:

- 1 The moon appears bright although it is not a source of light.
(Cairo 2024 - Week 6 C.W)
Because it doesn't emit its own light, but it reflects the sunlight.
- 2 Fireflies emit a luminous flash. (Week 7 Test 1)
To communicate together to warn other fireflies from predators or to attract a mate to reproduce.
- 3 Some animals have the ability to see in the dark. (Red Sea 2023)
Because some animals have a mirror-like membrane at the back of their eyes that reflects the light.
- 4 The eyes of humans do not glow in the dark like cats. (Cairo 2023)
Because humans don't have mirror-like membranes in their eyes.
- 5 Glass is a transparent material. (Week 8 Test 2 - Alex. 2024)
Because glass allows light to pass through.
- 6 Humans sometimes use codes. (Week 7 Test 2)
To communicate and transmit information.
- 7 A mirror can reflect light better than a painted surface. (Giza 2023)
Because a mirror is smoother than a painted surface.
- 8 Wood is considered an opaque material. (Alex. 2024)
Because it doesn't allow light to pass through it.
- 9 A shadow is formed when light falls on an opaque object. (Dakahlia 2024)
Because an opaque object doesn't allow light to pass through it.
- 10 You can see an object placed behind a glass cup or a lens. (Qalyubia 2023)
Because glass is a transparent object that allows light to pass through it.
- 11 None of the light energy passes through opaque objects. (Alex. 2023)
Because opaque objects either reflect light or absorb it

Q7

What happens if:

- 1 Fireflies do not emit flashes?

(Week 7 Test 3)

They can't communicate with each other.

They can't warn other fireflies from predators.

They can't attract a mate to reproduce.

- 2 A firefly wants to attract a mate to reproduce?

(Cairo 2023)

It will produce a chemical reaction inside its body to light up.

- 3 Light falls on a rough surface, such as wood or paper?

(Week 6 H.W)

Light will reflect (scatter or diffuse) in different directions.

- 4 The backcountry hikers do not have mirrors?

(Week 7 Test 1)

They can't attract the attention of rescue helicopters.

- 5 The codes have no meaning?

(Week 7 Test 2)

Brain can't decode and interpret the meaning.

- 6 Light falls on a shiny, smooth surface, such as a mirror?

(Red Sea 2023 - Week 6 H.W)

Light will reflect in one direction

- 7 The mirror-like membrane in a fishing cat's eyes is not present?

The fishing cat can't see well in low-light places.

(Dakahlia 2024)

- 8 You place an opaque object between a light source and a wall?

A shadow is formed.

(Ismailia 2023)

Q8

What is meant by each of the following:

- 1 Transparent objects

(Week 8 C.W)

They are objects that allow light to pass through and things can be seen through them, such as air and glass.

- 2 Code

(Week 7 C.W)

It is a pattern that has a meaning.

Q9

Answer the following questions:

- 1 Mention an example of behavioral adaptation in fireflies. (Week 7 Test 2)

Fireflies change their flash patterns to match the flash patterns of other groups of fireflies to communicate with them.

- 2 Mention one benefit of flashes emitted by fireflies. (Week 7 Test 3)

They use them for warning other fireflies from predators or attracting a mate to reproduce.

- 3 Mention two examples of codes used by humans in their daily lives.

(Week 7 H.W)

Thumbs-up or down

Language

Writing

Concept 2.1 Lessons 1 & 2

Q1 Choose the correct answer:

- 1 All the following are examples of pulling force, except.....
a. opening the desk drawer b. kicking a ball
c. tug-of-war game d. lifting up a bag (Qalyubia 2024)
- 2 When you move something toward you, this represents
a. pushing force b. light energy
c. pulling force d. sound energy (Cairo 2023)
- 3 When you move something away from you, this represents
a. pushing force b. light energy
c. pulling force d. sound energy (Alex. 2024)
- 4 Push or pull actions are considered types of
a. energy b. device
c. force d. adaptation (Giza 2023)
- 5 The force that is used to kick a ball with your legs is a
a. pull b. push
c. sound d. light (Port Said - Menoufia 2023)
- 6 Objects fall down to the center of the Earth by the force of
a. friction b. gravity
c. wind d. pushing (Cairo - Giza - Alex. 2023)
- 7 You can see the movement of the following objects, except the movement of
a. a flying airplane b. a running horse
c. sea waves d. the planet Earth (Giza 2023)
- 8 When an object is in motion, this means that its changes.
a. color b. shape
c. size d. position (Cairo 2023)
- 9 Which of the following will cause an object to move?
a. Balanced forces b. Unbalanced forces
c. Sound energy d. Light energy (Luxor 2022)

- 10** All the following are examples of motion, except
 a. a running person
 b. a ball traveling through the air
 c. a flying bird
 d. a sleeping dog (Cairo 2024)
- 11** When you sit on a chair, the force of gravity is and holding you in the chair. (Cairo 2022)
 a. pulling you upward
 b. pulling you downward
 c. pushing you upward
 d. pushing you downward

Q2 Put (✓) or (X):

- 1 The engine of a jet plane is weaker than the engine of a car. (Week 9 H.W) (✖)
- 2 Objects do not move if no force affects them. (Week 9 H.W) (✔)
- 3 The body is static when it moves from one place to another. (Week 9 H.W) (✖)
- 4 The movement of the planets can be seen in the sky. (Week 9 H.W) (✖)
- 5 A normal truck can move faster than a jet airplane. (Suez 2024) (✖)
- 6 When the position of an object changes in relation to a fixed point, it moves. (Assiut 2023) (✔)
- 7 Unbalanced forces cause a change in the object's position. (Minia 2024) (✔)
- 8 Gravity pulls objects upward. (Port Said 2023) (✖)
- 9 Unbalanced forces cause the motion of objects. (Mansoura 2023) (✔)
- 10 Moving an object away from you represents a pulling force. (Cairo 2024) (✖)

Q3 Write the scientific term:

- 1 It is a push or pull that is applied to an object, causing it to change its position. (Cairo 2022) (**Force**)
- 2 It is a force that makes objects move away from you. (Menoufia 2024 - Week 9 H.W) (**Pushing force**)
- 3 It is a force that causes objects to move toward you. (Week 9 H.W) (**Pulling force**)

- 4 It is a change in an object's position relative to a fixed point.
(Giza 2024) (**Motion**)
- 5 It is a force that pulls objects down toward the Earth.
(Behira 2024 - Week 9 Test 1) (**Gravity**)

Q4 Complete the following sentences:

- 1 **Unbalanced forces** cause the movement of static bodies. (Week 9 C.W)
- 2 The body whose position does not change is in a **static** state.
(Week 9 C.W)
- 3 There are two types of forces, which are **pull** and **push** forces. (Week 9 Test 2)
- 4 Kicking the ball is considered a **pushing** force. (Week 9 C.W)
- 5 Opening the door handle is a **pulling** force. (Week 9 H.W)
- 6 The leaves blow due to the force of **pushing** the air. (Week 9 C.W)
- 7 Tightening the hook is a **pulling** force. (Week 9 Test 3)
- 8 **Gravity** is the force that pulls things downwards. (Cairo 2024)
- 9 The fastest truck in the world is the **Shockwave** truck. (Week 9 C.W)
- 10 The speed of trucks differ according to the **power** and **number** of engines.
(Week 9 H.W)
- 11 The parachutes supplied to the Shockwave truck help drivers to reduce its **speed**. (Week 9 C.W)
- 12 When increasing the engine power of a truck, the speed will **increase**.
(Week 9 C.W)
- 13 To move a car more quickly, you must **increase** the engine pushing power. (Week 9 C.W)
- 14 The Shockwave truck is stopped by **3 parachutes**.
(Alex. 2023 - Week 9 H.W)
- 15 A moving object is acted on by **unbalanced** forces, while the body at rest is acted on by balanced forces. (Week 9 Test 1)

Q5

Give reasons for:

- 1 The Shockwave truck is faster than the normal truck.

(Giza 2024 - Week 9 Test 1)

Because it has three jet engines.

- 2 The cart starts moving when the gases come out of the fire extinguishers.

(Week 9 Test 2)

Because the pushing force of air from the fire extinguishers pushes the cart forward.

- 3 The body does not move when it is exerted on by balanced forces.

(Week 9 Test 3)

Because the forces that are applied on the body are equal forces.

Q6

What happens if:

- 1 You hit a ball strongly with your foot?

(Alex. (East) 2024)

The ball starts to move.

- 2 We increase the number of fire extinguishers on the cart?

(Week 9 Test 2)

The speed of the cart increases and it covers a long distance.

- 3 Balanced forces act on a static object?

(Beni Suef 2023)

The static object will not move.

Q7

What is meant by each of the following:

- 1 Pushing force

(Week 9 C.W)

It is a force that you use to move an object away from you.

- 2 Pulling force

(Week 9 C.W)

It is a force that you use to move an object towards you.

- 3 Movement (Motion)

(Week 9 H.W)

It is the change in the position of an object relative to a fixed starting point.

- 4 Gravity

(Week 9 H.W)

It is the force that pulls objects down towards the Earth.

Q8 Answer the following questions:

- 1 Give an example of pushing and pulling forces. (Week 9 Test 1)

Pushing force: kicking the ball

Pulling force: gravity pulls objects towards the Earth.

- 2 Mention the state of the body when balanced and other unbalanced forces affect it. (Week 9 Test 2)

Balanced forces: the object will not move.

Unbalanced forces: the object will move towards the greater force.

- 3 Give an example of an easily seen movement and another that cannot be seen. (Week 9 Test 3)

We can see a walking person.

We can't see the revolution (movement) of Earth around the Sun.

حمل الآن

مجاناً وحصرياً

المراجعة رقم (3)

اختبار شهر نوفمبر



SELF-ASSESSMENTS

on Concept (1.3)

Self-Assessment 10 On Lesson 1

1 (A) Put (✓) or (X) :

1. Eyes send information through nerves to the brain for processing them. ()
2. The membrane that presents at the back of cat's eyes depends on sound to detect the prey location. ()
3. Fishing cat has excellent night vision better than human. ()

(B) Give a reason for the following :

The eyes pupils of fishing cat open widely at the low-light places.

.....

2 (A) Choose from column (B) what suits it in column (A) :

(A)	(B)
1. Fishing cat	a. depends on touch to hunt.
2. Human	b. has no mirror-like membrane at the back of the eye.
	c. has a mirror-like membrane at the back of the eye.

1.

2.

(B) What happens if ...?

The structure of the fishing cat eye doesn't have a mirror-like membrane.

.....

3 Choose the correct answer :

1. If the human eyes contain a mirror-like membrane like which is found in fishing cat's eyes, then all the following statements are correct, except that human eyes
 - a. seem to glow at night.
 - b. have excellent night vision.
 - c. don't need night vision goggles.
 - d. need a strong source of light to can see at night.
2. In the low-light places, cat's eyes pupils open human's eyes pupils.
 - a. equal to
 - b. smaller than
 - c. narrower than
 - d. wider than
3. Which of the following animals has the ability to fly but can't see clearly at night ?
 - a. Fishing cat.
 - b. Snake.
 - c. Bat.
 - d. Fennec fox.

4. All the following have structural adaptation in their eyes, except
- | | |
|------------------------|------------------|
| a. owls. | b. fishing cats. |
| c. panther chameleons. | d. bats. |

Self-Assessment 11 till Lesson 2

1 (A) Put (✓) or (X) :

1. You can see a green ball inside a transparent glass box. ()
2. Opaque objects allow light to pass through and we can see objects through them. ()
3. In a completely dark room, we can see the transparent objects but opaque objects cannot be seen. ()

(B) Give a reason for the following :

You can see clearly through air.

2 (A) Choose from column (B) what suits it in column (A) :

(A)	(B)
1. Water.	a. It is an opaque material, that reflects light in different directions.
2. Glass.	b. It is a source of light energy.
3. Wood.	c. It is a transparent material that is used in making windows.
	d. It is a transparent material which is used for drinking.

1.

2.

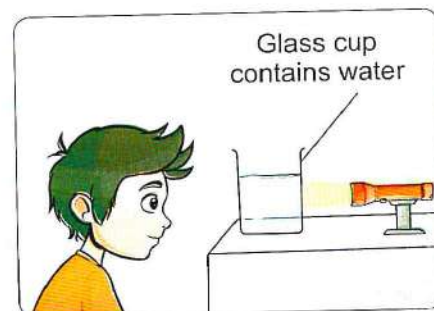
3.

(B) Cross out the odd word :

1. Mirror – Cloth – Paper – Wood sheet. (.....)
2. Wood door – Book – Wall – Glass cup. (.....)

3 Look at the opposite figure, then answer the questions below :

1. Can you see the light from the other side of cup ?
.....
 2. From this activity, we can conclude that
 - a. water and glass are opaque objects.
 - b. water and glass are transparent objects.
 - c. water is an opaque object, while glass is a transparent one.
 - d. glass is an opaque object, while water is a transparent one.
- 



Self-Assessment 12 till Lesson 3

1 (A) Put (✓) or (X) :

1. Firefly beetles form different flash patterns by using their legs. ()
2. Speaking is one of the ways to communicate with people. ()
3. Light energy is not used by humans or firefly beetles for communication. ()

(B) Give a reason for the following :

The wings of firefly beetles play an important role in the communication between them.

.....

.....

2 (A) Correct the underlined words :

1. Changing the flash patterns of firefly beetles is considered as a structural adaptation. (.....)
2. A cell phone is a device that is used in communication between animals. (.....)
3. Reading is a type of communication that depends on the sense of taste. (.....)

(B) How can firefly insects produce light to communicate with each other ?

.....

.....

3 Choose the correct answer :

1. is a type of communication which is used by humans only.
 a. Sound b. Light c. Echolocation d. Cell phone
2. Fireflies depend on sense for communication with each other.
 a. smell b. taste c. hearing d. sight
3. is considered a type of communication used by animals and humans.
 a. Writing b. Displaying light c. Reading d. Cell phone
4. A firefly beetle is a type of
 a. amphibians. b. lizards. c. insects. d. reptiles.

Self-Assessment 13 till Lesson 4

1 (A) Choose the correct answer :

- All of the following use light energy to send codes, except
 - lighthouses.
 - traffic lights.
 - musical instruments.
 - firefly beetles.
- Some living organisms can use light energy in communication such as
 - humans only.
 - firefly beetles only.
 - humans and firefly beetles.
 - bats and firefly beetles.
- The is the only living organism that can use language and speech to communicate with each other.
 - whale
 - owl
 - firefly beetles
 - human

(B) Give a reason for the following :

In cats' eyes the mirror-like membrane cannot make its function in a completely dark room.

2 (A) Put (✓) or (X) :

1. People who are lost in the desert can use mirrors to attract the attention of rescue helicopters.. ()
2. Writing is a type of communication that is used by human only. ()
3. Musical instruments cannot be used to send codes for communication. ()

(B) What happens if ...?

The structure of fishing cat's eyes are like that of human's eyes.

3 Complete the following table using the words below :

(communicate – eyes – flash patterns – light reflection – bodies – hunt – chemical reaction – mirror-like membrane)

Fishing cats	Firefly beetles
1. There is a special structure known as a presents at the back of their 2. This special structure of their eyes causes and helps them to at night.	1. They produce light, due to the occurrence of a inside their 2. They use their wings to form different that help them to at night.

SELF-ASSESSMENTS

on Concept (2.1)

Self-Assessment 14 On Lesson 1

1 (A) Put (✓) or (X) :

1. The engine of a normal truck is the same engine of a rocket. ()
2. Engineers use the same idea of rocket design in stopping the Shockwave truck. ()
3. You need energy to make a force to move a chair from one place to another. ()

(B) Give a reason for the following :

By increasing the number of fire extinguishers,
the distance that the cart moves will increase.



2 (A) Choose from column (B) what suits it in column (A) :

(A)	(B)
1. Normal engine	a. is used in stopping both of the Shockwave truck and rockets.
2. Jet engine	b. is used in moving a normal truck.
3. Parachute	c. is used to stop a normal truck.
	d. is used in moving the Shockwave truck.

1.

2.

3.

(B) Which is faster, a normal truck or the Shockwave truck ?

(Give a reason for your answer).

.....

.....

3 This picture represents one of the most powerful and fastest trucks in the world :

1. What is the name of this truck ?

.....

2. What happens if the three jet engines of this truck
are replaced by the engine of a normal truck ?

.....

.....



Self-Assessment 15 till Lesson 2

1 (A) Choose the correct answer :

1. A book is placed on a table is affected by
 - a. gravity pulling force only.
 - b. table pushing force only.
 - c. table pulling force and gravity pushing force.
 - d. table pushing force and gravity pulling force.
2. When you sit on a chair which of the following sentences is correct ?
 - a. gravity pulling you upward.
 - b. gravity pulling you downward.
 - c. chair pulling you upward.
 - d. chair pushing you downward.
3. We can see all the following motions, except
 - a. the rotation of Earth around the Sun.
 - b. a person crossing the road.
 - c. a person riding a bicycle.
 - d. a person swimming in the sea.

(B) What is meant by ...?

Motion

.....

.....

2 (A) Correct the underlined words :

1. To move up any object from the ground, the pulling force of your hand must be smaller than the pulling force of the gravity. (.....)
2. In tug-of-war game, the winner team is the team with the weaker force. (.....)
3. You can stop the ball that is thrown toward you by the pulling force of your hands against the ball movement. (.....)

(B) Give a reason for the following :

Parachutes are used in the Shockwave truck and rocket .

.....

November Tests

Total mark

15

Model 1

1 (A) Choose the correct answer :

(5 marks)

- Which of the following allows light to pass through it ?
a. Metal. b. Moon. c. Mirror. d. Lenses.
- All the following signals are information that the eyes receive, except
a. green traffic light. b. fire alarm.
c. signal fires. d. rescue flare.
- When you move something away from you, this represents
a. pushing force. b. light energy.
c. pulling force. d. sound energy
- When an object is in motion, this means that its changes.
a. color b. shape c. size d. position

(B) Give a reason for the following :

Wood is considered as an opaque material.

.....

2 (A) Put (✓) or (X) :

(5 marks)

- The firefly beetle is considered as a type of reptiles. ()
- You can see objects behind glass window as it is an opaque object. ()
- The stopping object can't move until a force acts on it. ()
- When a car crashes into a wall, it will not stop. ()

(B) What happens if ...?

A car runs out of fuel on a flat road.

.....

3 (A) Write the scientific term of each of the following :

(5 marks)

- It is a visible form of energy that travels in the form of waves. (.....)
- It is a force that is exerted when objects rub against each other. (.....)
- It is a pattern that has meaning. (.....)
- The force that pulls objects down toward the Earth. (.....)

(B) Arrange the following statements to show how we can see objects around us :

(.....) The light rays bounce off the object then reach into our eyes.

(.....) The electric lamp emits its own light.

(.....) The light rays fall on object in the form of waves.

Model 2

Total mark

15

1 (A) Complete the following sentences :

(5 marks)

1. Glass is considered from materials, while wood is considered from materials.
2. If you throw a ball through the air, it is affected by the force of your hand and the force of the Earth's gravity.
3. When light rays fall on rough surface, they will at directions.
4. Fireflies communicate with each other by producing a reaction inside their bodies that allow them to up.

(B) What happens to ...?

Light rays fall on a mirror.

2 (A) Correct the underlined words :

(5 marks)

1. The eye pupil in human eyes open wider than that in the nocturnal animals. (.....)
2. Moon can emit its own light. (.....)
3. The balanced forces cause the object to move. (.....)
4. The motion of a car is opposed by the gravity of air. (.....)

(B) What happens if ...?

The Shockwave driver opens the parachutes.

3 (A) Put (✓) or (X) :

(5 marks)

1. Red and green traffic lights are considered as codes. ()
2. Friction force always slows down or stops the motion of moving objects. ()
3. Unbalanced forces cause a change in the object position. ()
4. A normal truck is faster than the Shockwave truck. ()

(B) Give a reason for the following :

When you kick a ball laying on the ground, it moves.

1 (A) Write the scientific term of each of the following :**(5 marks)**

1. Materials that allow light to pass through them. (.....)
2. The time taken by the body to receive information from the environment. (.....)
3. The force that makes objects move away from you. (.....)
4. A change in the position of an object relative to a fixed starting point. (.....)

(B) What happens when ...?

Light falls on a smooth surface such as a mirror.

.....

2 (A) Choose the correct answer :**(5 marks)**

1. Light travels in lines in the form of waves.
a. curved b. zigzag c. straight d. circular
2. Reading and writing are common types of communication in world.
a. humans b. animals c. birds d. plants
3. Which of the following will cause an object to move ?
a. Balanced force. b. Unbalanced forces.
c. Sound energy. d. Light energy.
4. The work done is equal to the amount of transferred by a force that is used to move an object.
a. energy b. friction c. pushing d. gravity

(B) Define :

Code :

3 (A) Complete the following sentences using the words below :**(5 marks)**

(mirror-like membrane – air – friction – position)

1. Water and are transparent materials.
2. The force that slows down or stops motion is called
3. All cats have at the back of their eyes.
4. A force must act on a ball to start motion, so the of the ball will change.

(B) Give an example of :

1. Pushing force :
2. Pulling force :

حمل الآن

مجاناً وحصرياً

المراجعة رقم (4)

اختبار شهر نوفمبر



Question 1

Write scientific term for each of the following sentences:

Unit1
Concept 1.3

1. A type of animal whose eye structure helps it find its prey in the dark. (.....)
2. The organ that is affected by light and responsible for sight. (.....)
3. A species of nocturnal wild cats, whose eyes glow at night. (.....)
4. Objects that emit their own light. (.....)
5. The organ that is responsible for processing information receive by eyes, to know and recognize the surroundings. (.....)
6. A body that appears lighted in the sky, but it is not considered as a source of light. (.....)
7. A tool that the human can depend on to see in the dark. (.....)
8. The structural adaptation that gives fishing cat an excellent night vision. (.....)
9. The visible form of energy that enables us to see. (.....)
10. objects which light does not pass through (.....)
11. Organisms that use their wings to emit flashes of light. (.....)
12. A type of surfaces that reflects light in different directions. (.....)
13. A type of surface that reflects light in one direction with the same angle at which they strike the object (.....)
14. A pattern with meaning (.....)
15. Animals communicate with each other using flashes of light. (.....)
16. thumbs up or thumbs down (.....)
17. the time it takes a jerboa to respond to danger. (.....)
18. Animals be active at night research the food. (.....)

19. the main control center of the human body. (.....)
20. It sends flash codes that tell sailors where they are. (.....)
21. The forces that pull objects downward in the direction of the Earth. (.....)
22. Changing the position of an object relative to a fixed point. (.....)
23. the movement of the body from one place to another. (.....)
24. The force that arises between the surfaces of two objects in contact and affects in an opposite direction to the movement of the object" (.....)
25. The ability to do work (.....)
26. A force that causes objects to approach in your direction. (.....)
27. The force that makes objects move away from you. (.....)
28. The force that pulls objects down towards the center of the Earth. (.....)
29. A force that arises between two touching surfaces & opposite to the direction of movement. (.....)
30. The amount of energy required to move an object a distance through the force acting on it (.....)
31. The movement of an object from one place to another. (.....)
32. The influence which changes the energy to be able to do work. (.....)
33. It is a force that is exerted when objects rub against each other. (.....)
34. It is a force that slows down the motion of moving objects. (.....)

Unit 2
Concept 2.1

Question 2

Choose the correct answer:

Unit1
Concept 1.3

1. Which of the following organs are working together for seeing different objects?
(A) Nose and brain. (B) Eyes and brain.
(C) Ears and brain. (D) Tongue and brain.
2. Humans have eyes than nocturnal animals.
(A) bigger (B) smaller
(C) stronger (D) sharper
3. The pupils of human eyes open that of nocturnal animals.
(A) typical to (B) narrower than
(C) wider than (D) similar to
4. The wide eye pupils of fishing cat, allow amount of light to enter its eyes than those of human eyes.
(A) little (B) large
(C) very small (D) small
5. Nocturnal animals depend on all the following senses to find out their preys at night, except
(A) sight sense (B) hearing sense.
(C) taste sense. (D) smelling sense
6. The mirror-like membrane of the fishing cat is present
(A) inside the stomach. (B) at the back of the brain.
(C) inside the lungs. (D) at the back of the eye.
7. Which of the following do not need a big amount of light to see in the dark?
(A) Both humans and cats. (B) Neither humans nor cats.
(C) Cats only. (D) Humans only.
8. To detect the place of a table in a completely dark room, you can depend on
(A) sight sense (B) touch sense.
(C) taste sense. (D) hearing sense.

9. Light rays can pass through lenses, so they are made up of
- (A) wood (B) paper
(C) glass (D) metal
10. If there are two sheets, one is made of wood and the other is made of glass,
- (A) you can see the glass sheet through the wood sheet.
(B) you cannot see the wood sheet through the glass sheet.
(C) you can see the wood sheet through the glass sheet.
(D) light can pass through both sheets.
11. A firefly is not a bird, but it is a type of.....
- (A) amphibians. (B) lizards.
(C) beetles. (D) reptiles.
12. Which of the following is not a reason for fireflies to produce a flash light?
- (A) To attract a mate. (B) For communication.
(C) To warn off from predators. (D) To hear in the dark.
13. Changing the pattern of lighting up in a firefly is an example of adaptation(s).
- (A) structural and behavioral (B) camouflage and behavioral
(C) only structural (D) only behavioral
14. People can use the following ways to communicate, except
- (A) reading. (B) writing.
(C) speaking. (D) flying.
15. The ability to communicate through writing and speech separates..... from animals.
- (A) humans (B) animals
(C) plants (D) nonliving things
16. Reading and writing are common types of communication in world.
- (A) humans (B) animals
(C) Birds (D) plants

17. Displaying light is a type of communication that is found in both

- (A) plants and animals.
- (B) plants and humans.
- (C) animals and humans.
- (D) plants and nonliving things.

18. All of the following are forms of codes, except

- (A) thumb up and down hands.
- (B) faces expressions.
- (C) writing.
- (D) swimming.

19. When your eyes see a red traffic light, this means that you have to

- (A) increase your speed.
- (B) cross the street.
- (C) keep your speed as it is.
- (D) stop at once

20. People use a rescue flare to communicate with each other depending on the sense of

- (A) hearing
- (B) sight.
- (C) smell
- (D) touch

21. Sense organs collect information and send signals to..... for processing and understanding.

- (A) hands
- (B) legs
- (C) brain
- (D) stomach

22. All the following signals are information that the eyes receive, except

- (A) green traffic light.
- (B) fire alarm.
- (C) signal fires.
- (D) rescue flare

23. Push or pull actions are considered as types of

- (A) force.
- (B) device.
- (C) energy.
- (D) adaptation

24. When you kick a ball, it moves due to the effect of

- (A) pulling force only.
- (B) pushing force only.
- (C) pushing and pulling forces
- (D) sound energy only

25. When you move something away from you, this represents

- (A) pushing force.
- (B) light energy.
- (C) pulling force.
- (D) sound energy

Unit 2
Concept 2.1

26. When you move something toward you, this represents
(A) pushing force. (B) light energy
(C) pulling force. (D) sound energy.
27. The speed of a normal truck is more than that of
(A) a jet airplane only. (B) a jet airplane and a rocket.
(C) a rocket and a bicycle. (D) a bicycle only
28. Parachutes are used in the Shockwave truck to
(A) increase its speed. (B) decrease its speed.
(C) keep its speed as it is. (D) change its direction.
29. In the Shockwave truck, the three jet engines,
(A) don't affect its speed. (B) decrease its speed.
(C) stop its motion. (D) increase its speed
30. By increasing the number of fire extinguishers fixed onto a cart, its speed
(A) increases. (B) decreases.
(C) doesn't change. (D) becomes zero.
31. All the following motions occur by the effect of pulling force, except.....
(A) kicking a ball. (B) opening a closed drawer.
(C) wearing your socks. (D) lifting up a bag from the ground.
32. The of the air that comes out of fire extinguishers causes the movement of a cart forward.
(A) pulling force (B) light energy
(C) pushing force (D) sound energy
33. The force that occurs when an object rubs against another object is called
(A) friction. (B) gravity.
(C) push. (D) pull.
34. The force that tries to stop an object moving on a surface is called
(A) gravity. (B) friction.
(C) push. (D) pull.

35. There is a force between the car tires and the road that acts to decrease car's speed gradually.
- (A) gravity (B) pulling
(C) pushing (D) friction
36. Which of the following sentences describes the friction force?
.....
- (A) It pulls objects toward the ground.
(B) It pushes objects away from the ground.
(C) It slows down or stops objects in motion.
(D) It doesn't affect objects in motion.
37. When an apple falls from a tree down to the ground, it is affected by.....
- (A) friction force of air only.
(B) gravity pulling force only.
(C) gravity pushing force only.
(D) friction of air and gravity pulling forces.
38. Tamer pushes a ball on a flat ground and it covers a distance of 30 cm. If he pushes it with more force, it may cover a distance equal to cm.
- (A) 5 (B) 15
(C) 30 (D) 50
39. All of the following examples can move by a pushing force, except.....
- (A) a ball. (B) a swing.
(C) tug-of- war rope. (D) a car.
40. To stop a moving object we can apply a against it.
- (A) pushing force (B) gravity force
(C) sound energy (D) light energy
41. Samir pushed his toy car that moved forward, to stop it he should
- (A) push it in the same moving direction.
(B) pull it with a small force in the same moving direction.
(C) pull it with a large force in the same moving direction.
(D) push it in a direction opposite to its moving direction.

42. The work done is equal to the amount of transferred by a force that is used to move an object.

- (A) energy (B) friction
(C) pushing (D) gravity

Question 3

Complete the following sentences:

Unit1
Concept 1.3

1. In complete darkness, nocturnal animals depend on other senses such asand
2. To see things clearly at night, humans need a source of butanimals can hunt at night depending on their excellent night vision.
3. Human can see objects which give off their own light or objects which light.
4. Light travels inlines
5. Light travels in the form of
6. Objects that light can't pass through are calledwhile objects that allow light to pass through are called
7. A tree forms a shadow as it is anobject that doesn't allowto pass through
8. Cloth and paper are consideredsurfaces that scatter or diffuseenergy.
9. Human body, wood andalloware considered materials whichlight to pass through.
10. Smooth surface of materials reflects light rays in direction with sameat which they strike the object
11. Things can be seen throughobjects such asand
12. Fireflies use the sense ofto communicate with each other.
13. Fireflies produce flash patterns to attractto reproduce.
14. Fireflies communicate with each other by producing ainside their bodies that makes them light up.

15. A group of fireflies can change their ownto match the flash pattern of another group to communicate
16. Watching TV is a type of communication that use the senses ofand
17. Among the types of communication that are used by humans onlyare and
18. The types of communication that are used by both animals and humans areand
19. Humans can communicate with each other where ears of human detectenergy and eyes of human detectenergy
20. Fireflies useenergy in their communication.
21. Music is codes that use the sense ofto communicate.
22. Writing is a way of coding that uses the sense ofcommunicate
23. Fireflies useto emit flashes of light.
24. from the examples of codes are , ,house
25. Fireflies are found ontrees
26. The car can move or stop depending on the change ofacting on it.
27. To move anything from one place to another, you need toit orit.
28. In the Shockwave truck, engineers put threein it to increase its speed, and they installed threeto stop it
29. The idea of stopping the Shockwave truck is the same idea of stopping a moving
30. Engineers useto slow down the motion of thetruck and rockets.
31. The wind can move small things like of a tree, so engineers use thisidea in moving a cart by fixingonto it
32. If we put more than one fire extinguisher to a cart, so theof this cart will increase

33. Moving objects needuntil it stops, otherwise it will still be moving at the same speed.
34. The moving object is affected by the forces ofwhile the static object is affected by the forces of
35. There are two types of forces,force andforce
36. Kicking the ball isforce, while using the hook isforce.
37. Vehicles equipped with extinguishers move when air is emitted due to the force of
38. The umbrella provided to the jet truck helps to reduce
39. To move a car more quickly, you mustthe thrust of the engine.
40. Objects moving in the air are affected by a friction force indirection of its movement
41. When a car moves forward, we infer its movement by changing its
42. Objects whose position does not change are consideredobjects
43. During a tug-of-war game, if each team pulls the tug-of-war with equal force, the forces are
44. When you push a table to move on the floor, your force transfers from body to the table.
45. Any force applied to an object is considered as the effect that changesand allows it to dodone by this object.
46. The work done on a basketball is equal to the amount oftransferred from the player hand to the ball.
47. To stop the rolling ball on the ground, you need to exert aequal to that exerted by the ball in the opposite direction.
48. Humans use codes to transfer
49. Changing the Firefly to the pattern in which they flash is considered aadaptation

50. Travelers are usedto get the attention of the helicopter pilots to rescue them
51. Raise the thumb up or down are a type of
52. One of the common methods of communication between humans and animals is the use of
53.is considered as a code, the order of the letters carries meaning and transfer information.

Question 4

put (✓) or (X) and correct the wrong one:

Unit1
Concept 1.3

1. If the human has a mirror-like membrane at the back of his eyes, he can see clearly in the low-light places. ()
2. The light that enters the human eyes allows him to distinguish between weak and strong sounds. ()
3. The moon is not considered as a light source ()
4. We can see the moon bright although it doesn't emit any light ()
5. Light rays fall on objects then reflect off these objects into our eyes, causing vision. ()
6. Transparent objects include mirrors and lenses. ()
7. Rough objects tend to reflect light better than smooth objects ()
8. Both wooden piece and paper reflect incoming light rays at the same angle at which they struck them. ()
9. Mirror reflects most of incoming light rays that fall on it. ()
10. The light reflection depends on smoothness of the object's surface. ()
11. Fireflies produce flash lights to warn off from predators ()
12. Fireflies are wingless beetles. ()
13. Speaking is the only way to communicate with people. ()
14. Echolocation is a type of communication between humans. ()

15. Fireflies produce a chemical reaction inside their bodies that allows them to light up. ()
16. A cell phone is a device that is used in communication between humans ()
17. Animals communicate with each other by using different senses. ()
18. Sense organs can decode the information that is sent by the brain ()
19. Expressions on faces are codes that can help people predict our feelings. ()
20. Different languages have similar codes. ()
21. People use signal fires to communicate over distances of many kilometers ()
22. To open or close a door, we have to push or pull it. ()
23. Putting on a pair of socks needs a pushing force. ()
24. You need energy to push a car forward or backward. ()
25. A car can move faster than a bicycle. ()
26. A normal truck can move faster than a jet airplane ()
27. The three jet engines in the Shockwave truck allow it to fly. ()
28. A normal truck is slower than the Shockwave truck. ()
29. Parachutes are used to slow down the speed of the Shockwave truck quickly ()
30. When the air is released backward from the fire extinguishers fixed onto a cart, the cart moves backward ()
31. By decreasing the number of fire extinguishers fixed to a cart, the speed of the cart increases. ()
32. Using a remote control of a television needs a pushing force to act on its buttons. ()
33. By increasing the speed of a moving cart, the distance that it moves will decrease ()
34. The air released by fire extinguishers moves backward, so the cart moves forward. ()
35. When we decrease the number of fire extinguishers, the distance that the cart moves will increase. ()
36. When a car crashes into a wall, it will not stop. ()

Unit 2
Concept 2.1

37. Sometimes it is easy to observe the force that stops an object. ()
38. When a car runs out of fuel on a flat road, its speed increases gradually until it stops ()
39. Friction force always slows down or stops the motion of moving objects ()
40. The motion of an object on the ground is affected by a friction force. ()
41. Hard push causes an object to travel for a longer distance ()
42. If the same force acts on two different objects so, the bigger object will travel for a longer distance. ()
43. A football rolls on the ground to a distance then it stops. The force which stops the ball is the gravity force. ()
44. If a person moves a table through a distance, there is a work done. ()
45. Lifting a book upward needs more energy than pushing a truck. ()
46. Hitting a tennis ball needs a pulling force. ()

Question 5

Correct the underlined words in the following sentences:

Unit1
Concept 1.3

1. Humans and cats are similar in their seeing ability at night. (.....)
2. The energy that helps humans and animals see, is the sound energy. (.....)
3. The moon is one of the light sources in the sky. (.....)
4. The system that works with the eyes of living organisms for seeing objects is the digestive system. (.....)
5. We see the objects as a result of the absorption of light rays into our eyes. (.....)
6. Opaque materials include water, glass, air and lenses. (.....)
7. Rough objects reflect light rays in one direction at the same angle at which they struck the object. (.....)
8. Moving object stops when a force of the same amount is applied to it in the same direction of its motion. (.....)
9. If a car runs out of fuel, its speed increases. (.....)

10. The motion of a car is opposed by the gravity of air. (.....)
11. Animals can communicate by writing. (.....)
12. Firefly communicate with each other using the sense of smell. (.....)
13. From codes that help those around us to know if we are happy or angry is the fire. (.....)
14. The light used in the communication between the Firefly is produced by reflecting the moonlight. (.....)
15. Human communicates by echolocation. (.....)
16. Writing is one of the common ways of communication between humans and animals. (.....)
17. When exerted pushing force on the body increases, the body mass increases. (.....)
18. The speed of the bike decreases when you press the brakes due to the force of gravity. (.....)
19. The leaves of trees move due to the repulsion force of air. (.....)
20. When a force affects in opposite direction to movement of the object, its speed increases. (.....)

Question 6

Give reason for (scientific explanation) for each of the following:

1. The eye pupil of nocturnal animals differs from that of the human.
.....
2. All cats can see in the dark.
.....
3. The human body has a shadow.
.....
4. You can see an object placed behind a glass cup.
.....
5. A mirror can reflect light better than a painted surface.
.....

6. A chemical reaction occurs inside the body of fireflies.

.....

7. Travelers used mirrors.

.....

8. Fireflies emit a flash of light

.....

9. Codes are very important in human life.

.....

10. moon is not considered a source of light.

.....

11. The glass is transparent objects.

.....

12. Fireflies produce a bright flash.

.....

13. The shockwave is the fastest truck in the world.

.....

14. The ball placed on the ground does not move from itself

.....

15. The speed of the jet plane is greater than the speed of the truck.

.....

16. The car begins to move when the gases come out of the fire extinguishers fixed on it.

.....

17. The object does not move when it is affected by balanced forces.

Unit 2
Concept 2.1

18. If you push two similar toy cars on the same ground, one of them may travel for a longer distance than the other.

19. If the same force acts on a small car and a truck, the small car will travel for a longer distance than the truck.

20. The car stops moving when it collides with a concrete bumper.

21. The effect of friction in each car is different from the other.

22. Travelers are making sure to have mirrors with them on their trips.

23. Firefly communicate with each other through flashes of light.

24. When a ball hits the floor of the room, it stops after a while.

25. The ball returns again after being thrown upwards.

Question 7

What happens in the following cases:

Unit1
Concept 1.3

1. Humans have large eyes with larger pupils.

2. You place a wood sheet between a light source and a wall.

3. Light falls on rough objects.

.....

4. fireflies emit flashes at regular intervals?

.....

5. languages did not exist in different countries?

.....

6. predators close to fireflies?

.....

7. A group of fireflies meets another group of fireflies?

.....

8. Fireflies did not emit light flashes?

.....

9. The shockwave is not provided with umbrellas?

.....

Unit 2
Concept 2.1

10. A suitable force acts on a static object?

.....

11. Increase the number of fire extinguishers fixed on the vehicle?

.....

12. An unbalanced force acts on an object.

.....

13. A car runs out of fuel on a flat road.

.....

14. You push two similar balls with different forces on the ground.

.....

15. The static object when it is affected by balanced forces?

.....

16. Travelers are making sure to have mirrors with them on their trips.

.....

17. Firefly communicate with each other through flashes of light.

.....

18. When a ball hits the floor of the room, it stops after a while.

.....

19. The ball returns again after being thrown upwards.

.....

Question 8

Answer the following:

Unit1
Concept

1. How can you see objects?

.....

2. What is the function of...?

1) Night vision goggles:

2) Mirror-like membrane in cat's eyes:

3. Cross out the odd word:

1) Flashlight - The moon - Fire. (.....)

2) The moon Mirror - Candle. (.....)

4. Think: Do you see your image when you look at a piece of wood?

.....

5. Give examples of objects that reflect light and objects that do not.

.....

6. Think: Have you ever seen animals use light to communicate with each other?

.....
7. Why do fireflies use their senses to communicate?

.....
8. What do you know about communication and information transfer?

.....
9. How do humans use light to communicate with others?

.....
10. Explain how: fireflies communicate with each other

.....
11. Explain the importance of codes in our daily lives.

.....
12. Mention several examples of codes.

.....
11. Explain how humans use signals or codes to transmit information.

.....
12. Explain the importance of the membrane in cats' eyes.

.....
13. Explain how we can see things?

.....
14. Explain the similarities between a bat and a blind man's cane

.....
15. Explain how amphibians adapted to its environment.

16. State the scientific idea upon which the cane for the blind is based.

.....

17. What is the importance of ...?

-Lighthouse:

18. How is this truck stopped?

.....

Unit 2
Concept 2.1



19. When is it said that the body is in motion?

.....

20. Mention an example of pushing and pulling force.

.....

21. Explain the state of the body when it is affected by balanced and unbalanced forces

.....

22. Mention an example of a movement that can be easily seen and another that cannot be seen.

.....

23. Explain the difference between balanced forces and unbalanced forces through a tug-of-war game.

.....

24. What are the conditions that must be existed for the body to be in motion?

.....

25. When you sit on the chair without moving, what is the name of the force that affects you down?

.....

26. What is the force that affects the movement or stopping of the car?

.....

27. Explain how bats can locate the position of their prey?

.....

Question 9

Define the following (what is meant by):

Unit1
Concept

1. light

2. Source of light

3. Light reflection

4. Transparent object

5. Opaque object

6. Pushing force

7. Pulling force

8. Energy

9. Work

10 Force

11 Friction

Question 10

Various questions:

Unit1
Concept

1. Look at the opposite picture and answer:

- This animal is active and hunts its food. (day-night).

-The pupil of this animal is than that of a human (more - less) Is the structure of the eyes of nocturnal animals different that in humans eyes?

.....



2. How can we see things?

Draw the correct light path so the child can see the ball, showing the path of the arrows.



3. Complete the following diagram:



4. Complete the following table:

Point of comparison	Point of comparison	Point of comparison
Size of the eye		
Eye pupil		

5. Complete the following diagram:

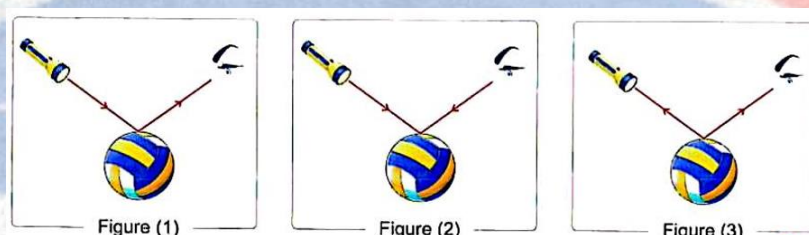
.....←Sources of light→

6. Put (✓) in front of suitable light source for the pictures in front of you:

	Natural sources	Artificial sources
		
		
		
		



7. Study the following three figures, then put (✓) or (x):



- 1) Human's eyes can see the ball in figure (3), because the ball emits light. ()
- 2) Figure (2) is not correct, because human's eyes don't emit light. ()
- 3) Figure (1) is correct, because the light ray of the flashlight bounces off the ball to the human's eyes. ()

8. Choose from column (B) what suits it in column (A):

(A)	(B)
1. Mirror	a. It is a transparent piece that allows light to pass through.
2. Piece of cloth	b. It is considered as a source of light.
3. Reflected light	c. It is a rough surface that scatters reflected light rays.
4. Lens	d. It is the light that bounces off a reflecting surface.
	e. It is a smooth and shiny surface that reflects most of falling light.

1. 2. 3. 4.

9. Arrange the following statements to show the correct sequence of how humans see different objects:

- (.....) Special nerves in the eyes send messages to the brain.
- (.....) The reflected light rays travels in a straight line into the eyes.
- (.....) The brain interprets the messages as an image.

- (.....) Light rays reflect off objects around us.

10. Classify the following materials into smooth materials and rough materials:

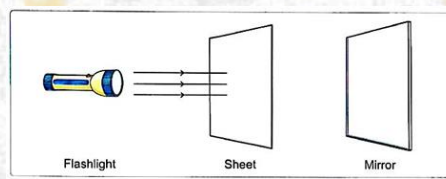
1) " Cloth - Mirror - Wood - Metal - Paper "

Smooth materials	Rough materials
.....	
.....	

2) "Wood - Air - Water - Metal - Lenses "

Opaque objects	Transparent objects
.....	
.....	

11. Study the following figure that shows a sheet placed between a flashlight and a mirror, then choose the correct answer:



- The mirror can reflect the light rays, if the sheet is made up of
(wood - glass)
- If we replaced the sheet with another mirror, it will..... the light rays.
(pass - reflect)

12. Look at the opposite figure, then answer the questions below:



- The shadow of the tree is formed, because the tree is object that doesn't allow light to pass through.
- Some of light rays fall on the tree are absorbed, while the other light rays are
- The surface of the tree body is considered as a surface, so the reflected light rays are in different directions.

13. Choose from column (B) what suits it in column (A):

(A)	(B)
1. Watching TV 2. Echolocation 3. Displaying light	a. is a type of communication in plants only. b. is a type of communication in animals only. c. is a type of communication in humans only. d. is a type of communication in both animals and humans.

1.

2.

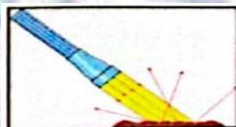
3.

14. Which body reflects light best?

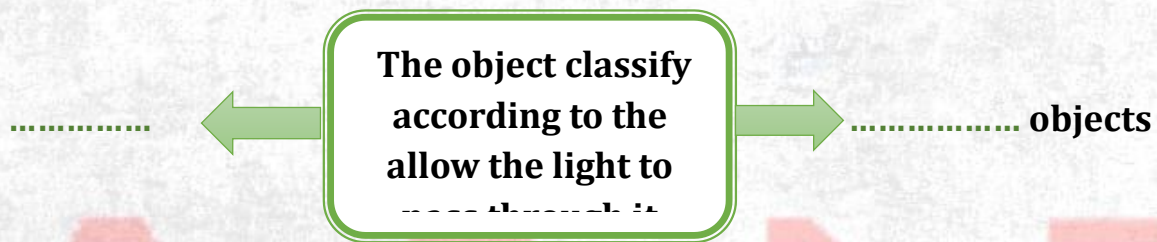
The object	Reflect the light/doesn't reflect the light	Body type (shiny/rough)
		
		
		
		

15. Complete the following diagram:

1. surface ← Light reflection → Surface



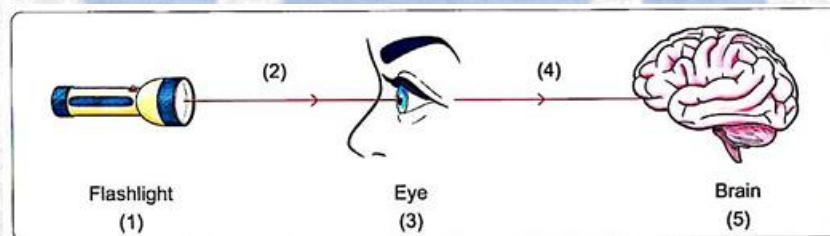
2.



16. Complete

Some ways of human communication	Some common communication methods between humans and animals	Some ways of animals communication
---	---	---

17. Study the following figure, then put (✓) or (x):



- 1) Number (5) represents the sense organ of light. ()
- 2) Number (1) represents a source of light. ()
- 3) Number (4) represents a special nerve through which the eye sends information to the brain for processing it. ()
- 4) Number (2) represents a light ray that travels in straight line to enter the eye. ()
- 5) Number (3) and (5) working together to collect and process different sounds. ()

18. Look at the following pictures, then complete the following sentences:

Unit 2
Concept 2.1



Picture (1) : Normal truck



Picture (2) : Jet airplane

1. The engine of picture (.....) is much powerful than the engine of picture (.....) .
2. When the engines of picture (.....) are placed in the picture (.....) it will turn into a Shockwave truck.
3. The engines that are used in picture (.....) are the same engines that are used in the Shockwave truck.

19. Look at the following pictures, then choose if the forces are "Balanced" or "Unbalanced":



1. A book on a table

(Balanced - Unbalanced)



2. A seesaw

(Balanced - Unbalanced)

20. Write the type of force that is used in each of the following situations:



--	--



--	--

21. Look at the following picture, then choose the correct answer:

- 1) Among the forces that act on the basketball in this picture are
 - a. pushing force of both gravity and the player's hand.
 - b. pulling force of both gravity and the player's hand.
 - c. pushing force of gravity and pulling force of the player's hand.



d. pulling force of gravity and pushing force of the player's hand.

2) The basketball will fall down to the ground due to the.....that acts on it.

- a. pushing force of gravity
- b. pulling force of gravity
- c. friction force of air
- d. friction force of ground

22. In the opposite figure what happens if we increase the number of fire extinguishers fixed to the cart.



23. Look at the picture of the man sitting in a wheelchair on a ramp.

- Think? What force helps a man move down the ramp?



- Explain? A man needs extra force as he climbs the ramp.

24. Look at the static cart image and complete:

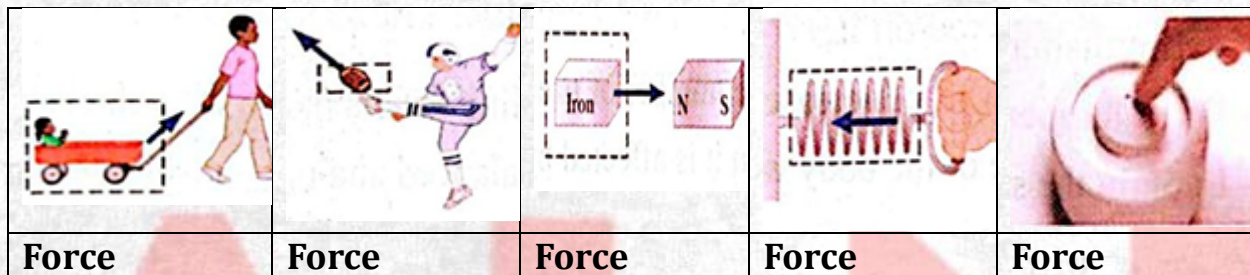
- The static shopping cart will not move unless affected by
- The cart is moving in direction



25. How do objects move?

Notice the following pictures that represent the set of activities you do in your daily life and then deduce the force that moves each of them (pulling or pushing force)?

				
Force	Force	Force	Force	Force



26. The following figure shows two similar toy cars are pushed to move on the same floor, study the figure then answer the questions below:

1. Which of these two cars is affected by a greater force?

(Give a reason for your answer).

.....

2. Choose the correct answer:

1. If the two cars were pushed by the same force, so

a. car (A) would move for a longer distance than car (B).

b. car (B) would move for a longer distance than car (A).

c. the two cars would move the same distance.

d. the two cars would not move.

2. If car (A) is replaced with a new car which is larger than car (B), and the two cars are pushed by the same force, so the new car will move a distance the distance that covered by car (B).

a. longer than

b. shorter than

c. equal to

d. twice

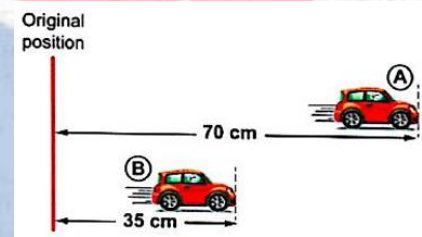
3. The two cars during motion are affected by all the following forces, except

a. the pushing force.

b. the friction force of the air.

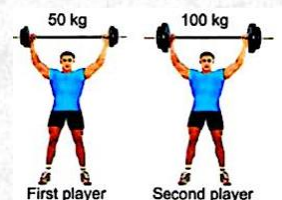
c. the friction force of the floor.

d. the pushing gravity force.



27. In the opposite figure, which of the two players does more work to raise the weights (Give a reason for your answer).

.....



28. Note the opposite pictures and then conclude:

(A) The apple fell from the tree and moved it down due to that represents the force.

-Capturing the apple with your hand and stopping its movement is force.

(B) What are the forces acting on the child's body in Figure (1)?

.....

-When you lift the bag as in Figure (2), it is affected by forces in different directions, mention them?

.....

(C) -Explain the reason for each of:

1-The box does not move in Picture No. (1)

.....

2-The box moved in Picture No. (2).

.....

29. Think and then complete: When a moving car hits a wall or concrete bumper next to the road?

-The car stops moving as a result of an exerted force opposite in and in the amount.

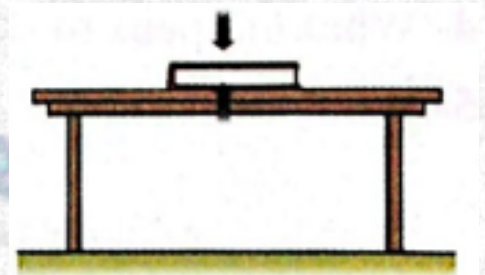


30. Look the opposite figure, then answer:

Does the book move over the table? (YES/NO)

Explain why

.....



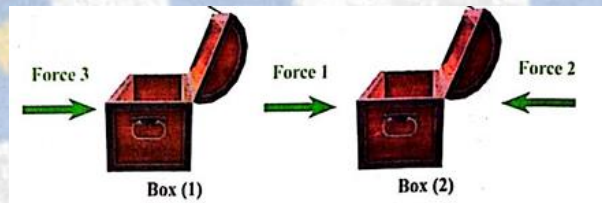
31.



32.

Effect of unbalanced forces on an object:

Look at the previous figure and then complete:



- The box number (1) will not move from its place because of

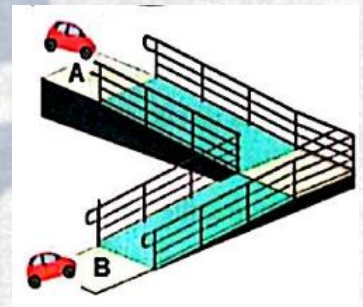
- The box number (2) may move towards the right because of

33.

Which of the two paths needs more force:

1- Push car A downwards.

2- Push car B upwards



34.

From the following figures, describe the force caused by the person(s) in each case:



Case (1): Children playing with the ball



Case (2): Girl opens the door

Case (1): Children playing with the ball

Case (2): Girl opens the door

Question 11

Compare between:

Unit1
Concept

1. sun and moon as a source of light.
2. Light falling on a shiny surface and light falling on a painted wall.
3. Pushing force and pulling force with examples?

Unit 2
Concept 2.1

مراجعات النخبة

Question 1

Write scientific term for each of the following sentences:

Unit1
Concept 1.3

1. A type of animal whose eye structure helps it find its prey in the dark. (Nocturnal animals)
2. The organ that is affected by light and responsible for sight. (eye)
3. A species of nocturnal wild cats, whose eyes glow at night. (Fishing cat)
4. Objects that emit their own light. (source of light)
5. The organ that is responsible for processing information received by eyes, to know and recognize the surroundings. (brain)
6. A body that appears lighted in the sky, but it is not considered as a source of light. (The moon)
7. A tool that the human can depend on to see in the dark. (night vision)
8. The structural adaptation that gives fishing cat an excellent night vision. (mirror like membrane)
9. The visible form of energy that enables us to see. (Light)
10. objects which light does not pass through (opaque objects)
11. Organisms that use their wings to emit flashes of light. (fire flies beetles)
12. A type of surfaces that reflects light in different directions. (Rough surface)
13. A type of surface that reflects light in one direction with the same angle at which they strike the object (Smooth surface)
14. A pattern with meaning (Code)
15. Animals communicate with each other using flashes of light. (Fire flies)
16. thumbs up or thumbs down (Code)

17. the time it takes a jerboa to respond to danger. (Reaction Time)
18. Animals be active at night research the food. (nocturnal animals)
19. the main control center of the human body. (The brain)
20. It sends flash codes that tell sailors where they are. (Light house)
21. The forces that pull objects downward in the direction of the Earth. (gravity)
22. Changing the position of an object relative to a fixed point. (Motion)
23. the movement of the body from one place to another. (Motion)
24. The force that arises between the surfaces of two objects in contact and affects in an opposite direction to the movement of the object" (balanced force)
25. The ability to do work (Energy)
26. A force that causes objects to approach in your direction. (Pulling)
27. The force that makes objects move away from you. (Pushing)
28. The force that pulls objects down towards the center of the Earth. (gravity)
29. A force that arises between two touching surfaces & opposite to the direction of movement. (Friction)
30. The amount of energy required to move an object a distance through the force acting on it (Work)
31. The movement of an object from one place to another. (Motion)
32. The influence which changes the energy to be able to do work. (Force)
33. It is a force that is exerted when objects rub against each other. (Friction)

Unit 2
Concept 2.1

34. It is a force that slows down the motion of moving objects. (Friction)

Question 2

Choose the correct answer:

Unit1
Concept 1.3

- Which of the following organs are working together for seeing different objects?
 (A) Nose and brain. (B) Eyes and brain.
 (C) Ears and brain. (D) Tongue and brain.
- Humans have eyes than nocturnal animals.
 (A) bigger (B) smaller
 (C) stronger (D) sharper
- The pupils of human eyes open that of nocturnal animals.
 (A) typical to (B) narrower than
 (C) wider than (D) similar to
- The wide eye pupils of fishing cat, allow amount of light to enter its eyes than those of human eyes.
 (A) little (B) large
 (C) very small (D) small
- Nocturnal animals depend on all the following senses to find out their preys at night, except
 (A) sight sense (B) hearing sense.
 (C) taste sense. (D) smelling sense
- The mirror-like membrane of the fishing cat is present
 (A) inside the stomach. (B) at the back of the brain.
 (C) inside the lungs. (D) at the back of the eye.
- Which of the following do not need a big amount of light to see in the dark?
 (A) Both humans and cats. (B) Neither humans nor cats.
 (C) Cats only. (D) Humans only.
- To detect the place of a table in a completely dark room, you can depend on
 (A) sight sense (B) touch sense.
 (C) taste sense. (D) hearing sense.

9. Light rays can pass through lenses, so they are made up of
(A) wood (B) paper
(C) glass (D) metal
10. If there are two sheets, one is made of wood and the other is made of glass,
(A) you can see the glass sheet through the wood sheet.
(B) you cannot see the wood sheet through the glass sheet.
(C) you can see the wood sheet through the glass sheet.
(D) light can pass through both sheets.
11. A firefly is not a bird, but it is a type of.....
(A) amphibians. (B) lizards.
(C) beetles. (D) reptiles.
12. Which of the following is not a reason for fireflies to produce a flash light?
(A) To attract a mate. (B) For communication.
(C) To warn off from predators. (D) To hear in the dark.
13. Changing the pattern of lighting up in a firefly is an example of adaptation(s).
(A) structural and behavioral (B) camouflage and behavioral
(C) only structural (D) only behavioral
14. People can use the following ways to communicate, except
(A) reading. (B) writing.
(C) speaking. (D) flying.
15. The ability to communicate through writing and speech separates..... from animals.
(A) humans (B) animals
(C) plants (D) nonliving things
16. Reading and writing are common types of communication in world.
(A) humans (B) animals
(C) birds (D) plants

17. Displaying light is a type of communication that is found in both

- (A) plants and animals. (B) plants and humans.
(C) animals and humans. (D) plants and nonliving things.

18. All of the following are forms of codes, except

- (A) thumb up and down hands. (B) faces expressions.
(C) writing. (D) swimming.

19. When your eyes see a red traffic light, this means that you have to

- (A) increase your speed. (B) cross the street.
(C) keep your speed as it is. (D) stop at once

20. People use a rescue flare to communicate with each other depending on the sense of

- (A) hearing (B) sight.
(C) smell (D) touch

21. Sense organs collect information and send signals to..... for processing and understanding.

- (A) hands (B) legs
(C) brain (D) stomach

22. All the following signals are information that the eyes receive, except

- (A) green traffic light. (B) fire alarm.
(C) signal fires. (D) rescue flare

23. Push or pull actions are considered as types of

- (A) force. (B) device.
(C) energy. (D) adaptation

24. When you kick a ball, it moves due to the effect of

- (A) pulling force only. (B) pushing force only.
(C) pushing and pulling forces (D) sound energy only

25. When you move something away from you, this represents

- (A) pushing force. (B) light energy.
(C) pulling force. (D) sound energy

Unit 2
Concept 2.1

26. When you move something toward you, this represents
(A) pushing force. (B) light energy
(C) pulling force. (D) sound energy.
27. The speed of a normal truck is more than that of
(A) a jet airplane only. (B) a jet airplane and a rocket.
(C) a rocket and a bicycle. (D) a bicycle only
28. Parachutes are used in the Shockwave truck to
(A) increase its speed. (B) decrease its speed.
(C) keep its speed as it is. (D) change its direction.
29. In the Shockwave truck, the three jet engines,
(A) don't affect its speed. (B) decrease its speed.
(C) stop its motion. (D) increase its speed
30. By increasing the number of fire extinguishers fixed onto a cart, its speed
(A) increases. (B) decreases.
(C) doesn't change. (D) becomes zero.
31. All the following motions occur by the effect of pulling force, except.....
(A) kicking a ball. (B) opening a closed drawer.
(C) wearing your socks. (D) lifting up a bag from the ground.
32. The of the air that comes out of fire extinguishers causes the movement of a cart forward.
(A) pulling force (B) light energy
(C) pushing force (D) sound energy
33. The force that occurs when an object rubs against another object is called
(A) friction. (B) gravity.
(C) push. (D) pull.
34. The force that tries to stop an object moving on a surface is called
(A) gravity. (B) friction.
(C) push. (D) pull.

35. There is a force between the car tires and the road that acts to decrease car's speed gradually.

- (A) gravity (B) pulling
(C) pushing (D) friction

36. Which of the following sentences describes the friction force?

-
(A) It pulls objects toward the ground.
(B) It pushes objects away from the ground.
(C) It slows down or stops objects in motion.
(D) It doesn't affect objects in motion.

37. When an apple falls from a tree down to the ground, it is affected by.....

- (A) friction force of air only.
(B) gravity pulling force only.
(C) gravity pushing force only.
(D) friction of air and gravity pulling forces.

38. Tamer pushes a ball on a flat ground and it covers a distance of 30 cm. If he pushes it with more force, it may cover a distance equal to cm.

- (A) 5 (B) 15
(C) 30 (D) 50

39. All of the following examples can move by a pushing force, except.....

- (A) a ball. (B) a swing.
(C) tug-of-war rope. (D) a car.

40. To stop a moving object we can apply a against it.

- (A) pushing force (B) gravity force
(C) sound energy (D) light energy

41. Samir pushed his toy car that moved forward, to stop it he should

- (A) push it in the same moving direction.
(B) pull it with a small force in the same moving direction.
(C) pull it with a large force in the same moving direction.

Ⓓ push it in a direction opposite to its moving direction.

42. The work done is equal to the amount of transferred by a force that is used to move an object.

Ⓐ energy

Ⓑ friction

Ⓒ pushing

Ⓓ gravity

Question 3

Complete the following sentences:

Unit1
Concept 1.3

1. In complete darkness, nocturnal animals depend on other senses such as **Hearing** and **smelling**
2. To see things clearly at night, humans need a source of **Light** but **nocturnal** animals can hunt at night depending on their excellent night vision.
3. Human can see objects which give off their own light or objects which **reflect** light.
4. Light travels in **straight** lines
5. Light travels in the form of **waves**
6. Objects that light can't pass through are called **opaque** while objects that allow light to pass through are called **transparent**
7. A tree forms a shadow as it is an **opaque** object that doesn't allow **light** to pass through
8. Cloth and paper are considered **rough** surfaces that scatter or diffuse **light** energy.
9. Human body, wood and **metal** are considered **opaque** materials which **don't** allow light to pass through.
10. Smooth surface of materials reflects light rays in **one** direction with same **angle** at which they strike the object
11. Things can be seen through **transparent** objects such as **glass** and **air**
12. Fireflies use the sense of **sight** to communicate with each other.
13. Fireflies produce flash patterns to attract **a mate** to reproduce.
14. Fireflies communicate with each other by producing a **chemical reaction** inside their bodies that makes them light up.

15. A group of fireflies can change their own **flash pattern** to match the flash pattern of another group to communicate
16. Watching TV is a type of communication that use the senses of **sight** and **hearing**
17. Among the types of communication that are used by humans only **reading** are and **writing**
18. The types of communication that are used by both animals and humans are **producing sounds** and **displaying light**
19. Humans can communicate with each other where ears of human detect **sound** energy and eyes of human detect **light** energy
20. Fireflies use **light** energy in their communication.
21. Music is codes that use the sense of **hearing** to communicate.
22. Writing is a way of coding that uses the sense of **sight** to communicate
23. Fireflies use **their wings** to emit flashes of light.
24. from the examples of codes are **Language, writing, light house**
25. Fireflies are found on **mangrove** trees
26. The car can move or stop depending on the change of **forces** acting on it.
27. To move anything from one place to another, you need to **push** it or **pull** it.
28. In the Shockwave truck, engineers put three **jet engines** in it to increase its speed, and they installed three **parachutes** to stop it
29. The idea of stopping the Shockwave truck is the same idea of stopping a moving **rocket**
30. Engineers use **parachutes** to slow down the motion of the **shockwave** truck and rockets.
31. The wind can move small things like **leaves** of a tree, so engineers use this idea in moving a cart by fixing **fire extinguishers** onto it
32. If we put more than one fire extinguisher to a cart, so the **speed** of this cart will increase
33. Moving objects need **force** until it stops, otherwise it will still be moving at the same speed.

34. The moving object is affected by the forces of **unbalanced** while the static object is affected by the forces of **balanced**
35. There are two types of forces, **pushing** force and **pulling** force
36. Kicking the ball is **pushing** force, while using the hook is **pulling** force.
37. Vehicles equipped with extinguishers move when air is emitted due to the force of **pushing force**
38. The umbrella provided to the jet truck help to reduce **speed**
39. To move a car more quickly, you must **increase** the thrust of the engine.
40. Objects moving in the air are affected by a friction force in **opposite** direction of its movement
41. When a car moves forward, we infer its movement by changing its **position relative to fixed point**.
42. Objects whose position does not change are considered **static** objects
43. During a tug-of-war game, if each team pulls the tug-of-war with equal force, the forces are **balanced Force**
44. When you push a table to move on the floor, your **pushing** force transfers from **your** body to the table.
45. Any force applied to an object is considered as the effect that changes **energy** and allows it to do **work** done by this object.
46. The work done on a basketball is equal to the amount of **energy** transferred from the player hand to the ball.
47. To stop the rolling ball on the ground, you need to exert a **force** equal to that exerted by the ball in the opposite direction.
48. Humans use codes to transfer **information**
49. Changing the Firefly to the pattern in which they flash is considered a **behavioral adaptation**
50. Travelers are used **mirrors** to get the attention of the helicopter pilots to rescue them
51. Raise the thumb up or down are a type of **code**
52. One of the common methods of communication between humans and animals is the use of **sound**

53. **Writing** is considered as a code, the order of the letters carries meaning and transfer information.

Question

put (✓) or (✗) and correct the wrong one:

Unit1
Concept 1.3

1. If the human has a mirror-like membrane at the back of his eyes, he can see clearly in the low-light places. (✓)
2. The light that enters the human eyes allows him to distinguish between weak and strong sounds. (✗)
3. The moon is not considered as a light source (✓)
4. We can see the moon bright although it doesn't emit any light (✓)
5. Light rays fall on objects then reflect off these objects into our eyes, causing vision. (✓)
6. Transparent objects include mirrors and lenses. (✗)
7. Rough objects tend to reflect light better than smooth objects (✗)
8. Both wooden piece and paper reflect incoming light rays at the same angle at which they struck them. (✗)
9. Mirror reflects most of incoming light rays that fall on it. (✓)
10. The light reflection depends on smoothness of the object's surface. (✓)
11. Fireflies produce flash lights to warn off from predators (✓)
12. Fireflies are wingless beetles. (✗)
13. Speaking is the only way to communicate with people. (✗)
14. Echolocation is a type of communication between humans. (✗)
15. Fireflies produce a chemical reaction inside their bodies that allows them to light up. (✓)
16. A cell phone is a device that is used in communication between humans (✓)
17. Animals communicate with each other by using different senses. (✓)

18. Sense organs can decode the information that is sent by the brain (X)
19. Expressions on faces are codes that can help people predict our feelings. (✓)
20. Different languages have similar codes. (X)
21. People use signal fires to communicate over distances of many kilometers (✓)
22. To open or close a door, we have to push or pull it. (✓)
23. Putting on a pair of socks needs a pushing force. (X)
24. You need energy to push a car forward or backward. (✓)
25. A car can move faster than a bicycle. (✓)
26. A normal truck can move faster than a jet airplane (X)
27. The three jet engines in the Shockwave truck allow it to fly. (X)
28. A normal truck is slower than the Shockwave truck. (✓)
29. Parachutes are used to slow down the speed of the Shockwave truck quickly (✓)
30. When the air is released backward from the fire extinguishers fixed onto a cart, the cart moves backward (X)
31. By decreasing the number of fire extinguishers fixed to a cart, the speed of the cart increases. (X)
32. Using a remote control of a television needs a pushing force to act on its buttons. (✓)
33. By increasing the speed of a moving cart, the distance that it moves will decrease (X)
34. The air released by fire extinguishers moves backward, so the cart moves forward. (✓)
35. When we decrease the number of fire extinguishers, the distance that the cart moves will increase. (X)
36. When a car crashes into a wall, it will not stop. (X)
37. Sometimes it is easy to observe the force that stops an object. (✓)
38. When a car runs out of fuel on a flat road, its speed increases gradually until it stops (X)

Unit 2
Concept 2.1

39. Friction force always slows down or stops the motion of moving objects (✓)
40. The motion of an object on the ground is affected by a friction force. (✓)
41. Hard push causes an object to travel for a longer distance (✓)
42. If the same force acts on two different objects so, the bigger object will travel for a longer distance. (X)
43. A football rolls on the ground to a distance then it stops. The force which stops the ball is the gravity force. (X)
44. If a person moves a table through a distance, there is a work done. (✓)
45. Lifting a book upward needs more energy than pushing a truck. (X)
46. Hitting a tennis ball needs a pulling force. (X)

Question 5

Correct the underlined words in the following sentences:

Unit1
Concept 1.3

1. Humans and cats are similar in their seeing ability at night. (Different)
2. The energy that helps humans and animals see, is the sound energy. (Light energy)
3. The moon is one of the light sources in the sky. (sun)
4. The system that works with the eyes of living organisms for seeing objects is the digestive system. (Nervous system)
5. We see the objects as a result of the absorption of light rays into our eyes. (Reflection)
6. Opaque materials include water, glass, air and lenses. (Transparent)
7. Rough objects reflect light rays in one direction at the same angle at which they struck the object. (Smooth)
8. Moving object stops when a force of the same amount is applied to it in the same direction of its motion. (Opposite)
9. If a car runs out of fuel, its speed increases. (decrease)
10. The motion of a car is opposed by the gravity of air. (Friction)
11. Animals can communicate by writing. (Sounds)
12. Firefly communicate with each other using the sense of smell. (Sight)

Unit 2
Concept 2.1

13. From codes that help those around us to know if we are happy or angry is the fire (expression on face)
14. The light used in the communication between the Firefly is produced by reflecting the moonlight. (Chemical Reaction)
15. Human communicates by echolocation. (Bats)
16. Writing is one of the common ways of communication between humans and animals. (Displaying light / Producing sounds)
17. When exerted pushing force on the body increases, the body mass increases. (speed)
18. The speed of the bike decreases when you press the brakes due to the force of gravity. (Friction)
19. The leaves of trees move due to the repulsion force of air (pushing)
20. When a force affects in opposite direction to movement of the object, its speed increases. (decrease)

Question 6

Give reason for (scientific explanation) for each of the following:

Unit1
Concept 1.3

1. The eye pupil of nocturnal animals differs from that of the human.

Because the eye pupil of nocturnal animals open wider than the eye pupil of human to allow more light enters

2. All cats can see in the dark.

Because it has a mirror-like membrane at the back of its eye that reflects the light fall on it and allows collect more light

3. The human body has a shadow.

because the body is opaque object that bounces off or is absorbed light fall on it but no light passes through it

4. You can see an object placed behind a glass cup.

because the glass cup is a transparent material which allow light to pass through.

5. A mirror can reflect light better than a painted surface.

because the mirror is smoother than the painted surface

6. A chemical reaction occurs inside the body of fireflies.

To allow them to light up and communicate with other fireflies

7. Travelers used mirrors.

To attract the attention of rescue helicopters

8. Fireflies emit a flash of light

To warn off other firefly Beetles from Predators and Attract amate to reproduce

9. Codes are very important in human life.

To transmit information and communicate with others

10. Moon is not considered a source of light.

because the moon doesn't emit its own light but its reflects the suns light

11. The glass is transparent objects.

Because it allow light to pass through

12. Fireflies produce a bright flash.

To warn off other fireflies beetles from Predators

13. The shockwave is the fastest truck in the world.

because They have Three jet engines make The Shockwave truck reach speed more than 500km in hour

14. The ball placed on the ground does not move from itself

because it need force to move and change its position

15. The speed of the jet plane is greater than the speed of the truck.

because the engines on a jet air plane are much more powerful than the engine in a truck

16. The car begins to move when the gases come out of the fire extinguishers fixed on it.

because the air releases backward that make car move forward

Unit 2
Concept 2.1

17. The object does not move when it is affected by balanced forces.

Because it is equal of force in different direction act on it

18. If you push two similar toy cars on the same ground, one of them may travel for a longer distance than the other.

due to the difference in the forces that act on each of them

19. If the same force acts on a small car and a truck, the small car will travel for a longer distance than the truck.

Because the small object travels faster than the bigger object when same amount of force acts on them

20. The car stops moving when it collides with a concrete bumper.

because there is a force of same amount is applied to it in the opposite direction

21. The effect of friction in each car is different from the other.

Because there is a friction force between the moving body and ground act different of any object

22. Travelers are making sure to have mirrors with them on their trips.

To attract the attention of rescue helicopters

23. Fireflies communicate with each other through flashes of light.

To warn off other firefly beetles from Predators and attract a mate To reproduce

24. When a ball hits the floor of the room, it stops after a while.

Due to the friction force between the ball and the flat road that acts in the opposite direction of ball movement.

25. The ball returns again after being thrown upwards.

because the effect of gravity

Question 7

What happens in the following cases:

Unit1
Concept

1. Humans have large eyes with larger pupils.

It Can see in the dark and allow more light enter their eyes

2. You place a wood sheet between a light source and a wall.

The shadow of the wood sheet is formed on the wall

3. Light falls on rough objects.

The light ray felt will scatter or diffuse in different direction

4. fireflies emit flashes at regular intervals?

they will interrupt their own pattern and start over again to match the other firefly

5. languages did not exist in different countries?

They can't communicate, with each other.

6. predators close to fireflies?

They use their wings to flash Pattern

7. A group of fireflies meets another group of fireflies?

They will change their own flash Pattern to match the flash pattern of the other group to Communicate

8. Fireflies did not emit light flashes?

They can't communicate with each other they don't warn off predators or attract a mate

9. The shockwave is not provided with umbrellas?

It can't stop easily and reduce its speed

10. A suitable force acts on a static object?

it moves and changes Path

11. Increase the number of fire extinguishers fixed on the vehicle?

The speed of cart increases and the distance that it moves increase

Unit 2
Concept 2.1

12. An unbalanced force acts on an object.

the object will move toward the greater force.

13. A car runs out of fuel on a flat road.

Its speed decrease gradually until it stops

14. You push two similar balls with different forces on the ground.

The ball that is affected by the greater force will move a longer distance than other ball

15. The static object when it is affected by balanced forces?

it doesn't move due to blanced force.

Question 8

Answer the following:

Unit1
Concept

1. How can you see objects?

When The source of light emits its own light rays.

-The light rays fall on objects.

-They will bounce off This object and reach our eyes

2. What is the function of...?

3) Night vision goggles: It is used by human to see in dark

4) Mirror-like membrane in cat's eyes: it reflects light allowing the cat eye to collect more light

3. Cross out the odd word:

3) Flashlight - The moon - Fire. (The moon)

4) The moon Mirror - Candle. (Candle)

4. Think: Do you see your image when you look at a piece of wood?

No

5. Give examples of objects that reflect light and objects that do not.

object That reflects→ glass-mirror

object That doesn't → rock-wood

6. **Think:** Have you ever seen animals use light to communicate with each other?

Yes, I have

7. Why do fireflies use their senses to communicate?

1. warn off other firefly beetles from predators

2. Attract a mate to reproduce

8. What do you know about communication and information transfer?

Like Human uses lights to communicate with each other to transfer information such as using traffic lights

9. **How** do humans use light to communicate with others?

such as using Traffic lights

10. Explain how: fireflies communicate with each other

They produce a chemical reaction inside their bodies that allow them to light up and communicate with other fireflies

11. Explain the importance of codes in our daily lives.

Human use code to Transmit information

12. Mention several examples of codes.

- expression of faces.

- writing

- music or Sounds.

13. Explain how humans use signals or codes to transmit information.

Through writing and Thumbs-up or Thumb down

14. Explain the importance of the membrane in cats' eyes.

When The light enters The Fishing Cat's eye, This light reflect off This membrane, allowing its eye To Collect more light

15. Explain how we can see things?

when light rays, strike, an object, light reflects off this object and we can See

16. Explain the similarities between a bat and a blind man's cane

The special cane of blind person and bats emit a high-pitched sound that bounces off object as an echo

17. Explain how amphibians adapted to its environment.

they breath in (through) their lungs. and skin to adapt to live on land and in water

18. State the scientific idea upon which the cane for the blind is based.

By the adaptation of bat echolocation

19. What is the importance of ...?

-Lighthouse: It sends codes in the form of flashes of light tell sailors where they are

Unit 2
Concept 2.1

20. How is this truck stopped?

To stop, engineers install three parachutes, that driver opens them to help slow down the shock wave quickly



21. When is it said that the body is in motion?

it is any change in The Position of an object relative to a fixed Starting point

22. Mention an example of pushing and pulling force.

Pushing→ a man pushes a wheel barrow

Pulling → a child pulls a toy car

23. Explain the state of the body when it is affected by balanced and unbalanced forces

-The state of object in balanced forces, fore it will object will not move

- The State of object in un blanché force, it will object will move

24. Mention an example of a movement that can be easily seen and another that cannot be seen.

movement hard can be seen → the rotation of the earth around sun

movement can be seen → a person walks down the street

25. Explain the difference between balanced forces and unbalanced forces through a tug-of-war game.

balanced force there are two force (Pushing and Pulling) is equal but un blanché force is pulling force is greater than pushing force

26. What are the conditions that must be existed for the body to be in motion?

To move up any object or move object the pulling force must be greater than the pushing force.

27. When you sit on the chair without moving, what is the name of the force that affects you down?

gravity

28. What is the force that affects the movement or stopping of the car?

Friction

29. Explain how bats can locate the position of their prey?

By using echolocation to find their food, the sound hit the preys such as insect

Question 9

Define the following (what is meant by):

Unit1
Concept

1. light

it is a visible from of energy that travels in the form of waves

2.	Source of light	It is something that emits (gives off) its own light
3.	Light reflection	when light rays strike an object, light reflects. (bounces) off this object
4.	Transparent object	They are objects that allow light to pass through
5.	Opaque object	They are objects that don't allow light to pass through
6.	Pushing force	Force moves object away from the person or thing
7.	Pulling force	Force moves object toward the person or object
8.	Energy	it is ability to do work or cause change.
9.	Work	it is force that causes an object to move a distance
10.	Force	it is a push or pull that is applied to an object causes it to change its position
11.	Friction	it is a force that is exerted when objects rub against each other

Question 10

Various questions:

Unit 2
Concept

1. Look at the opposite picture and answer:

- This animal is active and hunts its food. (day-night).

-The pupil of this animal is than that of a human (more - less) Is the structure of the eyes of nocturnal animals different than in human eyes?

Yes, it's difference because they have super sensory adaptation

2. How can we see things?

Draw the correct light path so the child can see the ball, showing the path of the arrows.



3. Complete the following diagram:



4. Complete the following table:

Point of comparison	Point of comparison	Point of comparison
Size of the eye	Big eye	Small eye
Eye pupil	Opens wider	Opens narrow

5. Complete the following diagram:

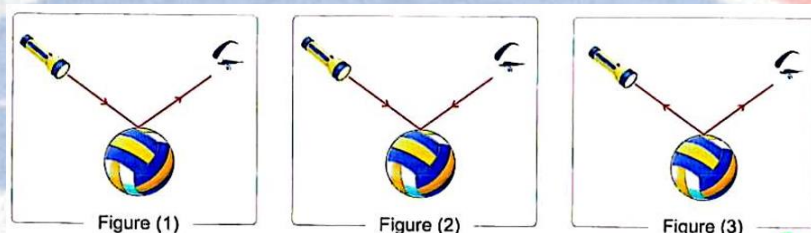
Natural sources ← Sources of light → Artificial sources

6. Put (✓) in front of suitable light source for the pictures in front of you:

	Natural sources	Artificial sources
	✓	
		✓
		✓
		✓

		✓	
		✓	

7. Study the following three figures, then put (✓) or (x):



4) Human's eyes can see the ball in figure (3), because the ball emits light. (x)

5) Figure (2) is not correct, because human's eyes don't emit light. (✓)

6) Figure (1) is correct, because the light ray of the flashlight bounces off the ball to the human's eyes. (✓)

8. Choose from column (B) what suits it in column (A):

(A)	(B)
1. Mirror	a. It is a transparent piece that allows light to pass through.
2. Piece of cloth	b. It is considered as a source of light.
3. Reflected light	c. It is a rough surface that scatters reflected light rays.
4. Lens	d. It is the light that bounces off a reflecting surface.
	e. It is a smooth and shiny surface that reflects most of falling light.

1.e. 2.c. 3.d. 4.a

9. Arrange the following statements to show the correct sequence of how humans see different objects:

- (3) Special nerves in the eyes send messages to the brain.
- (2) The reflected light rays travels in a straight line into the eyes.
- (4) The brain interprets the messages as an image.

- (1) Light rays reflect off objects around us.

10. Classify the following materials into smooth materials and rough materials:

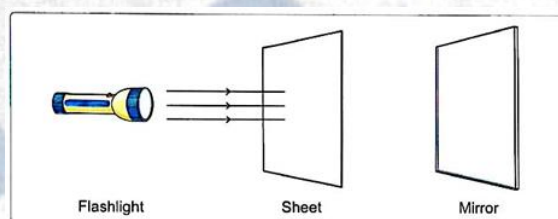
3) " Cloth - Mirror - Wood - Metal - Paper "

Smooth materials	Rough materials
Mirror Metal	Cloth Wood Paper

4) "Wood - Air - Water - Metal - Lenses "

Opaque objects	Transparent objects
Wood Metal	Air Water Lenses

11. Study the following figure that shows a sheet placed between a flashlight and a mirror, then choose the correct answer:



3) The mirror can reflect the light rays, if the sheet is made up of

(wood - glass)

4) If we replaced the sheet with another mirror, it will..... the light rays.

(pass - reflect)

12. Look at the opposite figure, then answer the questions below:

- 4) The shadow of the tree is formed, because the tree is **opaque** object that doesn't allow light to pass through.
- 5) Some of light rays fall on the tree are absorbed, while the other light rays are **reflected**
- 6) The surface of the tree body is considered as a **rough** surface, so the reflected light rays are in different directions.



13. Choose from column (B) what suits it in column (A):

(A)	(B)
1. Watching TV	a. is a type of communication in plants only.
2. Echolocation	b. is a type of communication in animals only.
3. Displaying light	c. is a type of communication in humans only.
	d. is a type of communication in both animals and humans.

1.c.

2.b.

3.d

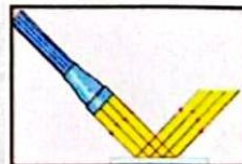
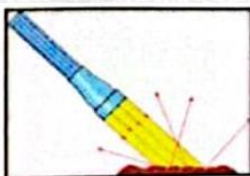
14. Which body reflects light best?

In front of you a group of objects made of different materials. Explain which one reflects light better and which one does not, mention the type of each object:

The object	Reflect the light/doesn't reflect the light	Body type (shiny/rough)
	Doesn't reflect	Rough
	reflect	Shiny
	Doesn't reflect	Rough
	Doesn't reflect	Rough

15. Complete the following diagram:

3. **Rough** surface ← Light reflection → **Smooth** surface



4.

Opaque
objects

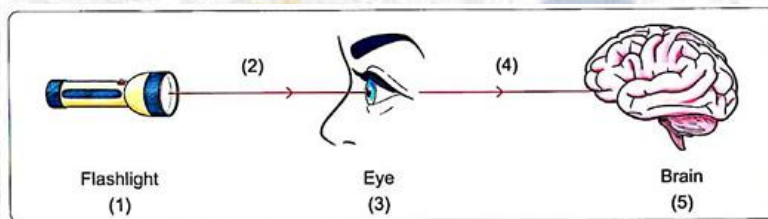
The object classify
according to the allow
the light to pass
through it into

Transparent
objects

16. Complete

Some ways of human communication Reading Writing sounds A call phone	Some common communication methods between humans and animals Displaying light Producing	Some ways of animals communication Echolocation
---	--	--

17. Study the following figure, then put (✓) or (x):



6) Number (5) represents the sense organ of light. (x)

7) Number (1) represents a source of light. (✓)

8) Number (4) represents a special nerve through which the eye sends information to the brain for processing it. (✓)

9) Number (2) represents a light ray that travels in straight line to enter the eye. (✓)

10) Number (3) and (5) working together to collect and process different sounds. (x)

18. Look at the following pictures, then complete the following sentences:

Unit 2
Concept 2.1



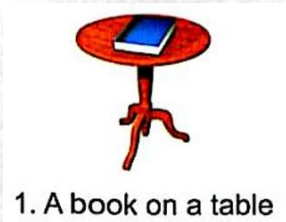
Picture (1) : Normal truck



Picture (2) : Jet airplane

1. The engine of picture (2) is much powerful than the engine of picture (1) .
2. When the engines of picture (2) are placed in the picture (1) it will turn into a Shockwave truck.
3. The engines that are used in picture (2) are the same engines that are used in the Shockwave truck.

19. Look at the following pictures, then choose if the forces are "Balanced" or "Unbalanced":



1. A book on a table

(Balanced - Unbalanced)



2. A seesaw

(Balanced - Unbalanced)

20. Write the type of force that is used in each of the following situations:



Pushing force



Pulling force



Pulling force



Pushing force

21. Look at the following picture, then choose the correct answer:

1) Among the forces that act on the basketball in this picture are

- a. pushing force of both gravity and the player's hand.
- b. pulling force of both gravity and the player's hand.
- c. pushing force of gravity and pulling force of the player's hand.
- d. pulling force of gravity and pushing force of the player's hand.**



2) The basketball will fall down to the ground due to the.....that acts on it.

- a. pushing force of gravity
- b. pulling force of gravity**
- c. friction force of air
- d. friction force of ground

22. In the opposite figure what happens if we increase the number of fire extinguishers fixed to the cart. **increase speed of cart**



23. Look at the picture of the man sitting in a wheelchair on a ramp.

- Think? What force helps a man move down the ramp?

Pushing force

- Explain? A man needs extra force as he climbs the ramp.



Because its different direction it needs mush energy

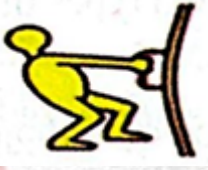
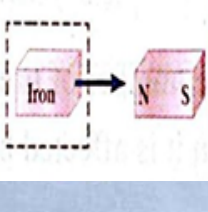
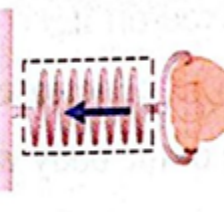
24. Look at the static cart image and complete:

- The static shopping cart will not move unless affected by **force**
- The cart is moving in **opposite** direction

25. How do objects move?



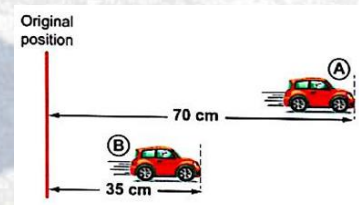
Notice the following pictures that represent the set of activities you do in your daily life and then deduce the force that moves each of them (pulling or pushing force)?

				
Force Push	Force Pull	Force Push	Force Pull	Force Push
				
Force Pull	Force Push	Force Pull	Force Push	Force Push

26. The following figure shows two similar toy cars are pushed to move on the same floor, study the figure then answer the questions below:

1. Which of these two cars is affected by a greater force?
(Give a reason for your answer).

Car(A) because it travels a longer distance than car (B)



2. Choose the correct answer:

1. If the two cars were pushed by the same force, so
 - a. car (A) would move for a longer distance than car (B).
 - b. car (B) would move for a longer distance than car (A).

c. the two cars would move the same distance.

d. the two cars would not move.

2. If car (A) is replaced with a new car which is larger than car (B), and the two cars are pushed by the same force, so the new car will move a distance the distance that covered by car (B).

a. longer than

b. shorter than

c. equal to

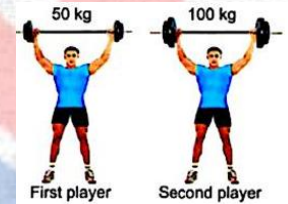
d. twice

3. The two cars during motion are affected by all the following forces, except

- the pushing force.
- the friction force of the air.
- the friction force of the floor.
- the pushing gravity force.

27. In the opposite figure, which of the two players does more work to raise the weights?

(Give a reason for your answer).



The second player because he raises a weight heavier than the first player so he needs large amount of energy to do more work

28. Note the opposite pictures and then conclude:

(A) The apple fell from the tree and moved it down due to **gravity** that represents the **pulling** force.

-Capturing the apple with your hand and stopping its movement is **pushing** force.



(B) What are the forces acting on the child's body in Figure (1)?

Pushing and pulling forces so it two blanced forces

-When you lift the bag as in Figure (2), it is affected by forces in different directions, mention them?

Arm pulling force, gravity pulling force



(C) -Explain the reason for each of:

1-The box does not move in Picture No. (1)



Because the **pulling force is equal. To the Pushing Force (Two blanced force).**

2-The box moved in Picture No. (2).

because the pushing force is greater than the pulling force (Two unblanched).

29. Think and then complete: When a moving car hits a wall or concrete bumper next to the road? **Brake secret**

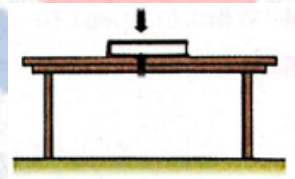
-The car stops moving as a result of an exerted force opposite in **direction** and **same** in the amount.



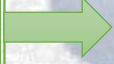
30. Look the opposite figure, then answer:

Does the book move over the table? (YES/NO)

Explain why

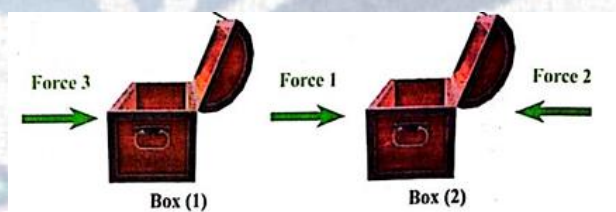


No, because the Pulling force of the gravity is equal to the pushing force of table (Two blanched force)

31. **Push** force pushes the book upward  **Forces affecting the book**  force pulls the book Gravity downward

32. Effect of unbalanced forces on an object:

Look at the previous figure and then complete:



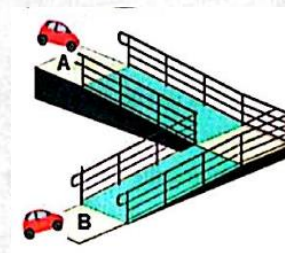
- The box number (2) will not move from its place because of **the to pulling force equal the pushing force**

- The box number (1) may move towards the right because of **the two un blanched force**

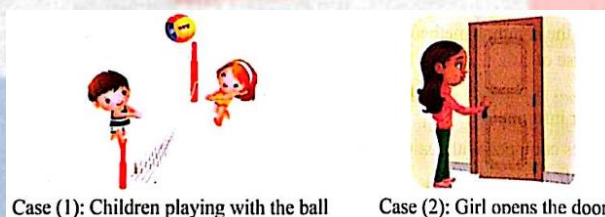
33. Which of the two paths needs more force:

1- Push car A downwards.

2- Push car B upwards



34. From the following figures, describe the force caused by the person(s) in each case:



Case (1): Children playing with the ball

Case (2): Girl opens the door

Case (1): Children playing with the ball **pushing**

Case (2): Girl opens the door **pulling**

Question 11

Compare between:

Unit1
Concept

1. sun and moon as a source of light.

Sun	Moon
emit light	Don't emit light
Source of light	Don't Consider source of light

2. Light falling on a shiny surface and light falling on a painted wall.

Shiny	Painted wall
The light reflects on one direction	the light reflects in different direction

3. Pushing force and pulling force with examples?

Push	Push
A man Pushes. a wheel barrow	A Child Pulls a Toy Car

Unit 2
Concept 2.1

حمل الآن

مجاناً وحصرياً

المراجعة رقم (5)

اختبار شهر نوفمبر





November Revision

Mr. Ahmed Elbasha

★ (1) Write the scientific term:

- 1) It is a push or pull that is applied to an object causes it to change its position. (.....)
- 2) The force that pulls objects down toward the Earth. (.....)
- 3) The organ that is affected by light and responsible for sight. (.....)
- 4) A body that appears lighted in the sky, but it is not considered as a source of light. (.....)
- 5) The visible form of energy that enables us to see. (.....)
- 6) The organ that is responsible for processing information received by eyes, to know and recognize the surroundings (.....)
- 7) The structural adaptation that gives fishing cat an excellent night vision (.....)
- 8) Materials that allow light to pass through. (.....)
- 9) Materials that we cannot see through it. (.....)
- 10) A type of surfaces that reflects light in different directions (.....)
- 11) Sense organ that can detect sound energy (.....)
- 12) Sense organ that can detect light energy (.....)
- 13) It is a force that slows down the motion of moving objects. (.....)

✱(2) Choose the right answer:

1. Which of the following organs are working together for seeing different objects?

- a. Nose and brain.
- b. Eyes and brain.
- c. Ears and brain.
- d. Tongue and brain.

2. All the following things are considered as light sources, except

- a. the Sun.
- b. fire.
- c. eyes.
- d. the light lamp.

3. The energy which must present to make our eyes able to see the objects around us is energy.

- a. sound
- b. electric
- c. light
- d. magnetic

4. To detect the place of a table in a completely dark room, you can depend on

- a. sight sense.
- b. touch sense.
- c. taste sense.
- d. hearing sense.

5. The character that helps the fishing cat to hunt a prey at night, is its ability

- a. to see the sunlight.
- b. of poor night vision.
- c. to digest its prey easily.
- d. of excellent night vision.

6. In the fishing cat's eyes, the mirror-like membrane is an important structure because it helps them to at night.

- a. sleep
- b. breathe
- c. keep their body warm
- d. hunt a prey

7. When light rays hit an object, all the following sentences are correct, except

- a. some of this ray is absorbed by the object.
- b. some of this ray is bounced off the object.
- c. some of these rays may go through the object.
- d. all of these rays are absorbed by the object.

8. All of the following are transparent objects, except

- a. glass.
- b. water.
- c. paper.
- d. air.

9. Light rays can pass through lenses, so they are made up of

- a. wood.
- b. paper.
- c. glass.
- d. metal.

10. Light travels in lines in the form of waves.

- a. curved
- b. zigzag
- c. straight
- d. circular

11. A shadow of an object is formed because

- a. light can pass through the object.
- b. light cannot pass through the object.
- c. this object is made of glass.
- d. this object is transparent.

12..... allows most of light to pass through, whiledon't.

- a. Air - glass b. Glass - air c. Wood - glass d. Glass -wood

13.Mirror causes falling light rays to

- a. pass through it. b. reflect at the same angle they strike the mirror.
c. reflect in different directions. d. diffuse like that of rough surfaces.

14.When an object is in motion, this means that its changes.

- a. color b. shape c. size d. position

15.When you sit on a chair, the force of gravity isand holding you in the chair.

- a. pulling you upward. b. pulling you downward.
c. pushing you upward. d. pushing you downward.

16.Which of the following will cause an object to move?

- a. Balanced forces. b. Unbalanced forces.
c. Sound energy d. Light energy.

17.All of the following are examples of motion, except

- a. a running person. b. a ball travelling through the air.
c. a flying bird. d. a sleeping dog.

18.You can see the movement of the following objects, except the movement of

- a. a flying airplane. b. a running horse.
c. sea waves. d. the planet Earth.

19.Gravity is a force that

- a. pushes objects down toward the Earth. b. pulls objects down toward the Earth.
c. pushes objects toward the sky. d. pulls objects toward the sky.

20.A firefly is not a bird, but it is a type of

- a. amphibians. b. lizards. c. beetles. d. reptiles.

21. Reading and writing are common types of communication in world.

- a. humans b. animals c. birds d. plants

22.Which of the following is not a reason for fireflies to produce a flash light?

- a. To attract a mate. b. For communication.
c. To warn off from predators. d. To hear in the dark.

23.Changing the pattern of lighting up in a firefly is an example of adaptation(s).

- a. structural and behavioral b. physical and behavioral
c. only structural d. only behavioral

24. People can use the following ways to communicate, except

- a. reading. b. writing. c. speaking. d. flying.

25. The force that occurs when an object rubs against another object is called

- a. friction. b. gravity. c. push. d. pull.

26. The force that tries to stop an object moving on a surface is called

- a. gravity. b. friction. c. push. d. pull.

27. There is a force between the car tires and the road that acts to decrease car's speed gradually.

- a. gravity b. pulling c. pushing d. friction

28. Push or pull actions are considered as types of

- a. force. b. device. c. energy. d. adaptation.

29. When you move something toward you, this represents

- a. pushing force. b. light energy.
c. pulling force. d. sound energy.

30. All of the following are forms of codes, except

- a. thumb up and down hands. b. faces expressions.
c. writing. d. swimming.

31. Sense organs collect information and send signals tofor processing and understanding.

- a. hands b. legs c. brain d. stomach

32. When your eyes see a red traffic light, this means that you have to

- a. increase your speed. b. cross the street.
c. keep your speed as it is. d. stop at once.

33. People use a rescue flare to communicate with each other depending on the sense of ..

- a. hearing. b. sight. c. smell. d. touch.

34. All the following signals are information that the eyes receive, except

- a. green traffic light. b. fire alarm.
c. signal fires. d. rescue flare.

✳(3) Put (√) or (X)

1. Cats have excellent night vision, while humans are not. ()
2. The moon is not considered as a light source. ()
3. We can see the moon bright although it doesn't emit any light. ()
4. Both of the moon and the cat's eyes reflect the light that falling on them. ()
5. Big eyes of fishing cat allow to gather and reflect any little amount of light ()
6. The light that enters the human eyes allows him to distinguish between weak and strong sounds. ()
7. Rough objects tend to reflect light better than smooth objects. ()
8. Mirror reflects most of incoming light rays that fall on it. ()
9. The light reflection depends on smoothness of the object's surface ()
10. Speaking is the only way to communicate with people ()
11. Fireflies produce flash lights to warn off from predators. ()
12. Echolocation is a type of communication between humans. ()
13. A cell phone is a device that is used in communication between humans. ()
14. Unbalanced forces keep an object in its place without moving. ()
15. Unbalanced forces cause a change in the object position. ()
16. A normal truck can move faster than a jet airplane. ()
17. When a car crashes into a wall, it will not stop . ()
18. When a car runs out of fuel, its speed increases gradually until it stops. ()
19. If a person moves a table through a distance, there is a work done. ()
20. Hitting a tennis ball needs a pulling force. ()

✱(4) Complete the following sentences:

1. Humans can communicate with each other where ears of human detect energy and eyes of human detect energy.
2. Fireflies use energy in their communication.
3. Writing is a way of coding that uses the sense of to communicate
4. Fireflies use the sense of to communicate with each other.
5. Fireflies communicate with each other by producing a inside their bodies that makes them light up.
6. Watching TV is a type of communication that use the senses of and
7. The fishing cat can hunt at night due to the bouncing off energy.
8. The eyes of fishing cat have a mirror-like membrane bounces off the light, and this is considered as a adaptation.
9. The fishing cat can hunt at night depending on the excellent sense of
10. Human can see objects which give off their own light or objects which light.
11. Light travels in lines.
12. Cloth and paper are considered surfaces that scatter or diffuse energy.
13. Objects that light can't pass through are called, while objects that allow light to pass through are called
14. A tree forms a shadow as it is an object that doesn't allow to pass through

✱(5) Correct the underline

1.	The <u>balanced</u> forces cause the object to move.	(.....)
2.	The energy that helps humans and animals see, is the <u>sound energy</u> .	(.....)
3.	The <u>moon</u> is one of the light sources in the sky.	(.....)
4.	<u>Sound</u> is a visible form of energy that bounces off objects into our eyes.	(.....)
5.	Eyes send messages to the <u>heart</u> for processing information	(.....)
6.	Moving an object away from you represents a <u>pulling</u> force	(.....)
7.	Moving an object toward you represents a <u>pushing</u> force	(.....)
8.	Changing the position of an object relative to a fixed point is known as <u>force</u>	(.....)
9.	Moving object stops when a force of the same amount is applied to it in the <u>same</u> direction of its motion	(.....)
10.	If a car runs out of fuel, its speed <u>increases</u>	(.....)
11.	<u>Opaque</u> materials include water, glass, air and lenses.	(.....)
12.	The <u>moon</u> is one of the light sources	(.....)

✱(6) Give reasons for:

1. The moon appears bright although it is not source of light.

.....

2. The fishing cat's eyes seem to glow in the dark.

.....

3. Candle is considered as a source of light.

.....

4. Shadow of an opaque body is formed when light falls on it.

.....

5. A mirror can reflect light better than a painted surface.

.....

6. You can see an object placed behind a glass cup.

.....

7. Humans receive and send information through speaking, writing and reading.

.....

8. Fireflies use different patterns of flash lights to communicate with each other.

.....

✱(7) What happens if ... ?

1. The mirror-like membrane in the fishing cat's eyes is not present.

.....

2. The moon can't reflect the sunlight

.....

3. You place a wood sheet between a light source and a wall.

.....

4. Light falls on a transparent body such as a glass window.

.....

5. Light falls on a rough surface

.....

6. A firefly wants to attract amate to reproduce

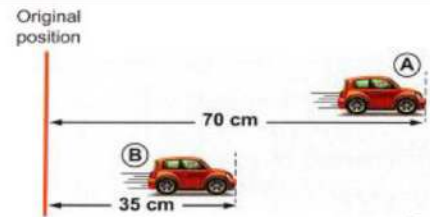
.....

*(8) TRY TO ANSWER:

1

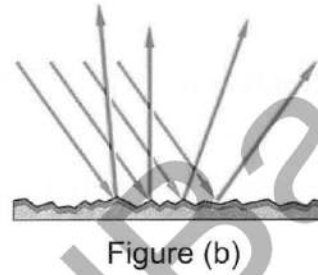
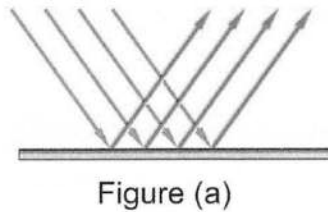
Which of these two cars is affected by a greater force?

(Give a reason for your answer).



2

Look at the following figures, then answer the questions below:



1. Complete:

a. The surface in figure (a) is

- Because

b. The surface in figure (b) is

- Because

2. Choose:

The surface in figure (a) may be

a. plastic. b. wood. c. mirror. d. cloth.

3

Classify the following materials into opaque objects and transparent objects:

"Wood - Air - Water - Metal - Lenses"

Opaque objects	Transparent objects

Model Answer

* (1) Write the scientific term:

- | | | | |
|------------|-------------------------|-------------------------|--------------------|
| 1. Force | 5. Light energy | 8. Transparent material | 11. Ear |
| 2. Gravity | 6. Brain | 9. Opaque material | 12. Eye |
| 3. Eye | 7. Mirror like membrane | 10. Rough surface | 13. Friction force |
| 4. Moon | | | |

* (2) Choose the right answer:

- | | | | | | |
|------|-------|-------|-------|-------|-------|
| 1. B | 7. D | 13. B | 19. B | 25. A | 31. C |
| 2. C | 8. C | 14. D | 20. C | 26. B | 32. D |
| 3. C | 9. C | 15. B | 21. A | 27. D | 33. B |
| 4. B | 10. C | 16. B | 22. D | 28. A | 34. B |
| 5. D | 11. B | 17. D | 23. D | 29. C | |
| 6. D | 12. D | 18. D | 24. D | 30. D | |

* (3) Put (✓) or (X)

- | | | | |
|--------|---------|---------|---------|
| 1. (✓) | 6. (X) | 11. (✓) | 16. (X) |
| 2. (✓) | 7. (X) | 12. (X) | 17. (X) |
| 3. (✓) | 8. (✓) | 13. (✓) | 18. (X) |
| 4. (✓) | 9. (✓) | 14. (X) | 19. (✓) |
| 5. (✓) | 10. (X) | 15. (✓) | 20. (X) |

* (4) Complete the following sentences:

- | | | | |
|------------------|----------------------|-------------------|--------------------------|
| 1. Sound – light | 5. Chemical reaction | 9. Sight | 13. Opaque – transparent |
| 2. Light | 6. Sight , hearing | 10. Reflect | 14. Opaque – light |
| 3. Sight | 7. Light | 11. Straight | |
| 4. Sight | 8. Structural | 12. Rough – light | |

* (5) Correct the underline

- | | | | |
|-----------------|------------|-------------|-----------------|
| 1. Unbalanced | 4. Light | 7. Pulling | 10. Decrease |
| 2. Light energy | 5. Brain | 8. Motion | 11. Transparent |
| 3. Sun | 6. Pushing | 9. Opposite | 12. Sun |

* (6) Give reasons for:

- Because the moon reflects the sunlight.
- Because it has a mirror-like membrane at the back of its eyes which bounces off the light.
- Because it gives off its own light.
- Because the opaque body doesn't allow light to pass through.
- Because the mirror is more smooth than the painted surface.
- Because the glass cup is a transparent material which allows light to pass through.
- To communicate with each other.
- To warn off from predators or to attract a mate.

* (7) What happens if ... ?

- It doesn't have excellent night vision so cannot hunt at night.
- It seems to be dark and we can't see it.
- The shadow of the wood sheet is formed on the wall, because light rays cannot pass through it.
- Light passes through the glass window.
- Light rays are reflected in different directions.
- It produces a chemical reaction inside its body to light up and attract a mate.

* (8) TRY TO ANSWER:

- A – because it moves longer distance

2.

- smooth surface , because the light rays reflect in one direction.
 - rough surface , because the reflected light rays scatter in different directions.

2. c

3. Opaque objects: wood , metal

Transparent objects: Air , water , lenses

حمل الآن

مجاناً وحصرياً

المراجعة رقم (6)

اختبار شهر نوفمبر



تجميع الأسئلة المقالية من التيمات

"Give Reason"

"Unit 1 Concept 3"

1 - All Cats Can see in the dark.

↳ Because they have mirror like membrane at the back of its eyes which reflects the light.

2 - Human body has a shadow.

↳ Because it is opaque object which doesn't allow light to pass through.

3 - Chemical reaction occurs inside the body of fireflies.

↳ To light up and to communicate with each other.

4 - Travellers used mirror. > i
Travellers are make sure to have mirror on their trips.

نفس الاجابه :-

↳ To attract helicopters for help.

5 - Fireflies emit flash light >
Fireflies produce bright flash.

نفس الاجابه

↳ to attract a mate, to warn off from predators and to communicate with each other.

6 - Humans sometime use Codes >
Codes are very important in human life.

نفس الاجابه

↳ To communicate with each other and to transmit information

(2)

7- The moon is not considered a source of light.

↳ Because it reflects sunlight.

8- The glass is transparent object.

↳ Because it allows light to pass through it.

"What happen if ?"

1- Humans have large eyes with large pupils.

↳ They will have excellent night vision and more light can enter the eyes to see in the dark.

2- Light falls on rough surface.

↳ it will reflect in different directions.

3- Fireflies emit flashes at regular intervals. فترات منتظمة

↳ They can communicate with each other.

4- Languages didn't exist in different countries.

↳ people can't communicate with each other.

5- predators close to fireflies.

↳ they use their wings to make different flash patterns to warn off others from predators.

6- A group of fireflies meet another group of fireflies.

↳ they will change their flash pattern to match the flash pattern of another group to communicate.

EXplain اشرح

1-How Can We see things.

- • Light falls on objects then bounce off to reach our eyes.

2-How fireflies communicate with each other.

- they produce chemical reaction inside the body to light up so they can communicate.

3-How human use code or signals to transmit information.

- Human use code to transmit information such as:-
- thumb up = good.
 - thumb down = bad.
 - Traffic Light = stop or go.
 - Expression of face = know feelings.
 - Writing = know meaning of words.
 - Light house = Tell sailors where they are.

4-The importance of membrane in cat eyes.

- it helps cat to have excellent night vision to see and hunt at night.

5-Compare between sun and moon as a source of light.

- Sun is a source of light. moon is not source of light but reflect sunlight.

6-Compare between light fall on shiny surface and painted wall.

- on shiny surface, light will reflect in one direction.

on painted wall, light will reflect in different directions.

7-The importance of codes in our life.

- to transmit information and to communicate with each other.

(4)

Unit 2 Concept 1 Starting and stopping

* Give reason *

1. The shockwave truck is the fastest truck in the world.

↳ Because it has 3 jet engines.

2. The speed of jet plane is greater than the speed of truck.

↳ Because it has jet engine which is more powerful.

3. The car begins to move when the gases come out from fire extinguisher fixed on it.

↳ Because when the air moves backward, the cart moves forward.

4. The object doesn't move when it is affected by balanced force.

↳ Because it is affected by equal force in opposite directions.

5. The ball on the ground doesn't move from itself.

↳ Because it needs force to make it to move.

6. The car stops moving when it collides with concrete bumper.
حادث خرسانی

↳ Because the bumper applied a force on a car equal the force that pushes the car to the bumper.

7. When a ball hits the floor, it stops after a while.

↳ Because of the friction force between the ball and the floor in opposite direction.

5

What happen if ?

1- The shockwave is not provide with umbrellas $\leftarrow$ (Parachute)

$\hookrightarrow$ The driver of shockwave truck can't stop it.

2- A suitable force acts on a static object. جس ثابت

$\hookrightarrow$ the static object will move

3- Increase the number of fire extinguisher fixed to the vehicle.

$\hookrightarrow$ the speed will increase and it will move long distance.

4- An unbalanced force acts on an object.

$\hookrightarrow$ the object will move.

5- The static object when it is affected by balanced force.

$\hookrightarrow$ the object will not move and still static.

اسئلة متنوعة

1- Compare between pushing and pulling force with examples.

$\hookrightarrow$ Pushing force; - is the force that you make to move object away from you.

ex:- kicking the ball.

$\hookrightarrow$ Pulling force; - is the force that you make to move object towards you.

ex:- pulling the bag.

2- Mention an example of movement that can be seen easily and that can't be seen.

$\hookrightarrow$ Can be seen; - Walking person.

Can't be seen; - rotation of Earth around the Sun.

(6)

3- Explain the state of body when it is affected by balanced and unbalanced force.

→ Balanced force: - the body will not move.

→ Unbalanced force: - the body will move.

4- Explain the difference between balanced and unbalanced force through Tug of War game.

→ Balanced force: - the rope will not move.

→ Unbalanced force: - the rope will move to the greater force.

5- What are the conditions that must be existed for the body to be in motion?

→ The body must be affected by unbalanced force to move and change its position.

6- When you sit on a chair without moving. What is the name of the force that affects you down.

→ The gravity pulling force.

7- What is the force that affects the movement or stopping car?

→ The friction force.

Scientific Term Concept 1.3

1. A type of animal whose eyes helps it to find its prey in the dark (Fishing Cat).
2. Objects which light doesn't pass through (opaque object).
3. Organisms that use their wings to emit flashes of light (Fireflies beetles).
4. Pattern with meaning. (Code).
5. Thumb-up or thumb-down. (Code).

دى بس الذسلة الموجودة فى البقات
بس ميعا فى حاجات تانية لدرم
تكون عارنوا علشان كده
لدرم تراجع صفحه الترفيقات

8. The amount of energy required to move object a distance through a force acting on it (Work).

Scientific Term Concept 2.1

1. The force that pulls objects downwards in the direction of the Earth. (gravity pulling force).
2. Changing the position of an object relative to fixed point. (Motion).
3. The movement of the body from place to another (motion).
4. The force that arises between 2 objects in contact and affects in opposite direction of movement (Friction force).
5. A force that causes objects approach in your direction. (pulling force).
6. The ability to do work (energy).
7. The influence which changes energy to be able to do work (Force).

Definitions of Concept 3

1- Light:-

it is the visible form of energy that can be seen.

7- Rough surface

It is the surface that reflects light in different directions.

2- Night Vision goggles:-

it is a device that helps human to see in the dark.

8- Code:-

it is the pattern that has meaning.

3- Source of Light:-

it is something that emits its own light.

4- Transparent objects:-

They are objects that allow light to pass through.

5- Opaque objects:-

They are objects that don't allow light to pass through.

6- Smooth surface:-

It is the surface that reflects light in one direction.

(9)

Definitions & units / Concept 1

1- Force:-

It is push or pull that applied on an object to change its position.

2- Pushing force:-

It is a force you make to move object away from you.

3- Pulling force:-

It is a force you make to move object towards you.

4- Shockwave truck:-

It is the fastest and powerful truck in the world.

5- Motion:-

It is any change in the position of an object relative to fixed point.

6- Gravity:-

It is the force that pulls objects down to the earth.

7- Friction force:-

It is the force that is exerted when objects rub against each other.

كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9

